

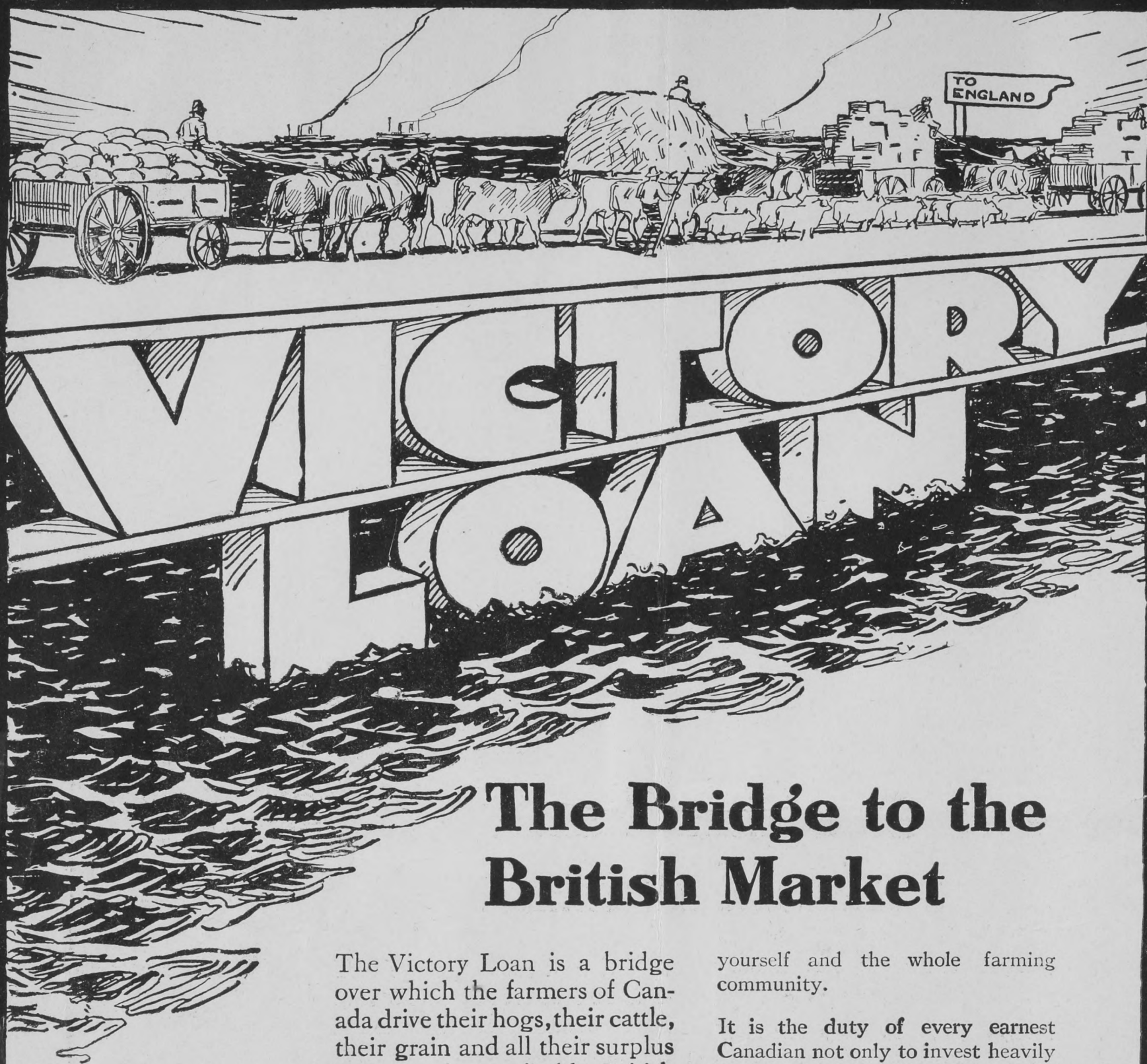
The **CANADIAN** THRESHERMAN AND **FARMER**

WINNIPEG CANADA
NOVEMBER
NINETEEN EIGHTEEN

BETTER FARMING — BIGGER CROPS — BETTER PRICES



Published Monthly by E. H. HEATH CO. LIMITED — Our Sixteenth Year



The Bridge to the British Market

The Victory Loan is a bridge over which the farmers of Canada drive their hogs, their cattle, their grain and all their surplus crops to the profitable British market.

For, the money raised by the Victory Loan enables Canada to give credit to Great Britain. And only by means of that credit can Great Britain buy the products of Canada's farms.

Therefore, when you come forward at your country's call and loyally lend your money that Canada may continue her vigorous prosecution of the war, you are also benefitting

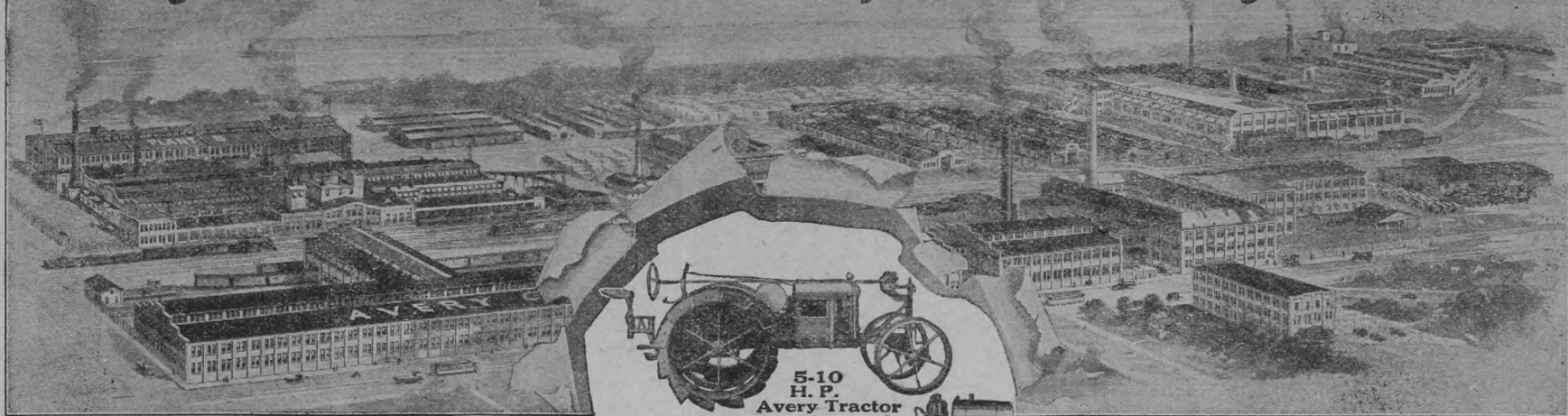
yourself and the whole farming community.

It is the duty of every earnest Canadian not only to invest heavily in Victory Bonds 1918, but to work among his neighbors to make the loan a success.

Before the subscription lists close, every man should realize the sterling character of the investment; the good interest return of $5\frac{1}{2}\%$; the undoubted security offered in the Bonds of this wealthy nation; and the vital importance to all classes of people, particularly to the farmers, of the Victory Loan 1918.

**Buy
Victory Bonds**

Avery Machines are Built Complete in Avery Factories



This Means—The Same High Standard of Workmanship Throughout—Prompt and Efficient Service

THERE is a big difference between a tractor built complete by **one** company and a tractor whose units are built by **several** companies and then assembled together. Avery Tractors are built complete in three big Avery factories. The Avery Company are builders, not assemblers. Avery users know where to go for service and renewal parts should they be needed. There is but one organization back of every unit in the Avery Tractor. This means dependability—the big feature that you are looking for in tractor service.

Extraordinary Features Mean Extraordinary Service

Avery Motors are special tractor motors, designed especially for tractor work and built **only** for the Avery Tractor. They are low speed. They have cylinder walls that are renewable—and are valve in head—they have gasifiers that turn kerosene and distillate into gas and enable them to burn all the fuel. The main crankshaft bearings are adjustable. Crankshaft is practically unbreakable.

The five sizes of Avery Tractors from 8-16 to 40-80 h. p. are of the same design. All are equipped with this special tractor motor, which has more original features than any other tractor motor built.

All have the patented Avery sliding frame transmission, which does away with intermediate gears and gives the Avery the least shafts of any double-drive two-speed tractor built.

Motorize Your Farm With An Avery Outfit

The Avery line is the one complete standardized line of motor farming machinery. There are six sizes of Avery Tractors—a size for every size farm.

There is also a size Avery Grain-Saving Thresher and a size Avery plow

for every size tractor. In addition you can get the Avery Motor Cultivator for planting and cultivating corn and other row crops. This is the greatest agricultural machine invented since the binder. It makes the motorization of every farm crop possible.

Big Output, Popular Priced Machines

If Avery machines were built by ordinary methods in the ordinary factory they would cost you more money. It takes two good things to make a good machine. First, a good design, and second, an up-to-date manufacturing plant. The reason why Avery Tractors are so well built and can be had at such low prices is, because they are manufactured by one concern in large quantities in their own big modern factories.

5-10
H. P.
Avery Tractor

8-16 H. P.
Avery Tractor

12-25 H. P.
Avery Tractor

18-36 H. P.
Avery Tractor

25-50
H. P.
Avery Tractor

40-80
H. P.
Avery Tractor

Avery
Motor
Cultivator

Light and Heavy Tractor
Plows for All Size
Tractors

There's a
Size Avery
Thresher
For Every
Size Run

Send For The Avery Catalog

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AVERY

Motor Farming, Threshing
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Successfully Used by Farmers In All 48 States and 61 Foreign Countries

Steam is Certain

There is nothing like **Steam** for threshing power.

You have learned that when anything happens to your Gas Engine it stops.

You spend a world of time hunting for your trouble.

Maybe you find it, maybe you don't.

If it is small or light it does not furnish steady power. You must have steady power to thresh with.

Steam always furnishes it.

When anything happens with it you can find the trouble.

You can always Steam it a little harder and keep it running.

Buy a **Steam** Engine to thresh with.

The Nichols & Shepard, the **Old Reliable** Steam Traction Engine, is always ready and is always there with the power.

Buy it now if you expect to get one in time for the next threshing season.

NICHOLS & SHEPARD CO.

In Continuous Business Since 1848

Builders **EXCLUSIVELY** of **THRESHING MACHINERY**

Red River Special Threshers, Feeders, Wind Stackers, Steam and Oil-Gas Traction Engines

BATTLE CREEK, MICH.

BRANCH HOUSES and Agencies: (with Full Stock of Repairs) at

REGINA, Saskatchewan

H. P. NORTON COMPANY, CALGARY, Alberta

WINNIPEG, Manitoba



Vol. XXIII

WINNIPEG, CANADA, NOVEMBER, 1918

No. 11

MAKE IT YOUR CHIEF CONCERN—YOUR IMMEDIATE ACT

FELLOW citizen of Canada, were you ever so proud of anything in your life as you are at this moment of the fact that you are a citizen of the British Empire?

Do you know of anything in conduct that beats the incurable decency of the British Empire?

What would you be worth to-day if Britain had not kept her word to France in the fall of 1914? How would you feel in this hour of victory if the men who spoke for you then had funk'd it and left brave France and thrice brave Belgium at the mercy of the merciless Hun?

These are questions that all have their most obvious answer, but there is another which you have still to answer, and that is: How are you going to keep your word to the boys of your home town who are now in France and Flanders?

In 1914 you said to them: "Boys, we will back you to the last dollar!" You positively said that on a thousand platforms, and at the railway depot when you bade them good-bye, and you have reiterated it again and again—while you still felt the need of the boys.

Did you mean it, or are you but one of the yellow curs who only keep their word when the need to do so is imperative, and when you can't get out of it?

Did ever pals do for you what they have done? And now all they expect of you is a loan of the price of their homeward trip! They propose giving you interest on the accommodation at the rate of 5½ per cent per annum. No "cheap skates"—these noble lads of Canada—and, moreover, they guarantee both principal and interest with the entire resources of the British Empire.

Can you at this moment stand in need of instruction or guidance or goading as to your relationship to Canada's Victory Loan.

Victory Loan Must Succeed



AT this supreme moment we must not fail to reach the \$500,000,000 mark—

1—To bring the boys home.

2—To maintain them in Europe till peace is firmly established.

3—To maintain our industrial activities and provide new employment for munition workers and soldiers as they return.

4—To continue our loans to Britain for buying Canadian food.

5—To enable Canadian workers to get their rightful share of orders for rebuilding Belgium and France.

Monday, November 11, will be recorded as the greatest day in British history. We all relaxed and rejoiced, and will remember it as long as we live.

Let us, in our rejoicing, not forget the tremendous responsibility that rests on us.

Canada's exports of agricultural produce in 1915 amounted to \$209,000,000. For the last fiscal year the exports were \$704,000,000. That is why our markets for cattle, sheep, hog products, wheat, oats, beans and other products have kept up the prices and enabled Canadian farmers and business men to secure such good prices. He who saves for this loan, kills two birds with one stone. He is patriotically helping to secure a final peace, and also safeguarding the home market for his home products. The commonsense business man can't do otherwise. Get ready for it.

D. R. WOOD,

Chairman Dominion Executive Victory Loan, 1918.

Despite the fact that every decent citizen of Manitoba must be humiliated by the suggestion, it is necessary to say that this Province can now produce its quota of the Victory Loan only by a supreme effort in which all must participate during the few days that remain.

If the campaign had been conducted in reasonably favorable conditions there could have been no doubt of its success; the value of Victory Bonds as an investment is such that the motive of

self-interest, apart from every consideration of duty, ought to have assured more than a full response to the call of the Government.

But the conditions of the campaign have not been favorable. The prospect of peace—although peace leaves untouched the obligation to provide this money—has turned public interest away from the loan.

An added disadvantage of far-reaching consequence has been the influenza epidemic. Public

meetings could not be held and canvassers have fallen ill. In some districts outside of Winnipeg whole teams have been incapacitated and in some cases their successors have fallen victims to the scourge.

The effect of this condition is especially noticeable in the country districts. Many of them have done magnificently, but it is useless to disguise the fact that the returns from the country to date have been somewhat disappointing.

The reason for this is doubtless that a breakdown of the organization in the country, from unforeseen causes is not easily repaired. Whatever the reason, however, the condition remains and is one which the people of rural Manitoba must face during the next few days.

The reputation of the province is at stake. We cannot afford to have it said that Manitoba fell short of its quota, while the people of the adjoining States—despite the fact that U. S. Liberty Bonds offer a lower rate of interest than Canadian Victory Bonds—subscribed an amount considerably in excess of that required of them.

In the few days that remain, then, there must be no let up. You, who read this, must see it as your concern. If you have subscribed something, but less than you are able, you must do more. If you have delayed action until now you must act without further delay. Remember that soon we must face the men who went overseas from Manitoba.

Our own great lads who took every risk a man can take for his friends are acclaimed all round the world as of the very bravest of those who cleaned up the world's worst cesspool. No job was ever more faithfully and completely brought to a finish. Have you done your part?

PROFITABLE FARMING IS MADE POSSIBLE BY USE OF THE TRACTOR

By H. L. Horning

WHEN the farmer finds that his farm is not producing enough to keep him, what does he do? He cannot go across the road and take a slice of someone else's farm. He has got to go down deeper and get another farm.

The fecundity of the soil can be measured roughly by the cubical contents of the seed bed. Intensive cultivation depends on better physical preparation of the seed bed, together with a correct chemical balance and moisture for the crop to be raised, all operations on the soil being so timed as to bring soil activity, climate and plant growth into harmony. These problems of increasing the depth of the seed bed, improving its physical and chemical condition and, taking advantage of the right time of the year from the standpoint of moisture and bacterial activity indicate that the tractor is potentially the best means of production for meeting the food problem. The tractor is particularly effective in raising the energy foods. An analysis of the average diet indicates it will enter into the production of 54 per cent of the energy foods.

Tractors make farming possible on a business basis. Among the many advantages of tractor farming are the following:

1. Many farms can be made to substantially increase their crops, as the tractor can bring up one inch more of the virgin soil than the horse has ever been able to turn over. By turning over one inch more the following year, the soil can be further improved. Many crop outputs can be increased 20 per cent by these methods. Some soils do not lend themselves to an increased output by means of subsoil cultivation, as the top soil is only seven inches deep.

2. On many farms very deep plowing is required in order to bring up the good subsoil and thus to reclaim worn-out land. Such overworked farms are found in many of the older settled portions of Western Canada.

3. A tractor allows a farmer to make the most of a good day, by plowing three times as much as with horses. He can also harvest at such high speed that grain can be cut at exactly the right time and thus its maximum food value can be retained. The tractor will also save a substantial proportion of the crops of some of the northern districts, in which the season for growing is comparatively short and the shortage of

farm labor makes it impossible to harvest the crop before winter.

4. The tractor will increase the output per man on the farm, so that it is at least three times that possible with horse methods of cultivation. This is particularly interesting at this time, when there is such a shortage of men on the farms of our country.

5. Tractors, when used for July plowing in the winter wheat belt, will increase the output greatly; depending on various conditions this crop will be as much as five times what would be obtained with the September plowing. Tractors can be used in the hot month of July, when it would be impossible for horses to live for any effective work,

even for a very few hours a day. In the month of July the condition of the soil is correct, from a chemical standpoint, to produce a strong sprout and effective roots.

In July the rainfall over the wheat belt is such as to help the condition of the soil in producing a hardy grain growth which in September and the dry months of the fall and winter, will be able to withstand the lack of moisture, the wind and cold. The tractor, because of its increased output per day and per man, allows the total plowing on the farm to be in July which gives the most effective yield. The tractor can work twenty-four hours per day if necessary, while the horse can only work a maximum of four.

The science of agronomy, which considers rainfall during season, sunshine, wind, the chance of drought, evaporation, temperature, the type of storms and the average amount of rain at one time, can be used to good advantage in operating tractors.

6. The tractor allows a larger acreage to be put into produce food for human consumption, inasmuch as the horse requires the crops from five acres of land to support him for a year. The land required to raise the 35,000,000 bushels of food for farm horses can be used for other necessary human food or for food of the horse in other work for which he is better fitted.



Note the thickness 3 layers

Over a Hundred Thousand ROOFS

were covered during 1917 with
**BRITISH COLUMBIA
RED CEDAR SHINGLES**

The famous Shingles from the Pacific Coast are today more popular than ever. Over Two Billion Red Cedar Shingles were demanded during 1917—an advance of 15 per cent. over the previous year.

THE 100 PER CENT. ROOF

IN APPEARANCE	IN SERVICE	IN SATISFACTION
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PERFECT PROTECTION guaranteed by the 3-ply solid covering of a natural non-conductor.

DURABILITY assured by the decay resisting oils with which nature has saturated the wood.

ECONOMY—Costs only 25 cents per 100 square feet on a life of 25 years (a low estimate for a B. C. Red Cedar Shingle roof).

"Roofing Helps"—a booklet which tells you all about B. C. Red Cedar Shingles—why they are superior—how to lay them—general facts about roofing—a handbook every man owning buildings or planning to build should have.

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Issued by the Publicity section of
The Shingle Agency of British Columbia
STANDARD BANK BUILDING
VANCOUVER, B.C.

Help the
SAILOR

Who helps
YOU!



300,000 men of the Merchant Marine braved the U-boat and floating mine for us and 16,000 have given their lives unflinchingly that our soldiers and their Allies might have food, munitions and comforts.

It is our duty to help the dependents of these men—they have no Government or charitable fund to draw upon so give liberally during

SAILORS' WEEK---December 1st to 7th inclusive

Manitoba's objective is only \$150,000

Campaign Committee

J. W. HAMILTON, Hon.-Treas.
611 Notre Dame Investment Bldg., Winnipeg

Make Cheques payable to

THE NAVY LEAGUE OF CANADA
W. R. ALLAN, President, Manitoba Division

The food shortage for the coming year is only preliminary to the shortage of the coming seasons. Economic conditions that will exist throughout the world from this time until two years after the war will be such as to prevent the return to normal prices of food and other commodities.

The tractor industry is now hampered and cannot do its duty in solving the food problem because of conditions resulting from our national crisis. The production of tractors could be at least doubled with the present facilities if factories could be supplied with material and labor for the fulfilment of present demands.

The tractor, therefore, when exercising its full function, can revolutionize agricultural methods. It is time for something of the sort. The flood of population to the cities has gone on until a shortage of 2,000,000 men exists on the farm. Volumes have been written by economists and students of sociology on the migration of the rural population.

The new method of agriculture must go on through an evolution to the end that agriculture will not mean serfdom. There is no such oppression as chores; no prison term as irksome as the lot of the farmer's life without means

of access to town; no serfdom so hard as the long hours and toil on the land by old methods. Farming must be made so pleasant, profitable, so close to the pleasures of the city, so near the markets, that it will be a vast business instead of a prison sentence.

The rural free delivery, the telephone, the automobile, the motor truck, are all bringing a new life, to the country. The tractor must bring democracy to the sons and daughters of the soil. It must

set them free to enjoy life, liberty and the pursuit of happiness.

FIRST-CLASS TESTIMONY FROM A BOY WHO BIDS FAIR TO BECOME A LEADER IN AGRICULTURE

Carman, Man., Jan. 31st, 1918.

Dear Sir:—

My father bought a 12-24 Waterloo Boy tractor to drive a 22-36 Red River Special separator.

I am 15 years old, and had not had any experience with the tractor. I learnt to drive it by running it around the yard, and learnt to set it in line with the separator. The only trouble was to get the right mixture of fuel, air and water to get the most power.

During threshing we used 16 gallons of kerosene and 1½ quarts of lubricating oil per day of 12 hours.

After threshing we plowed six acres per day with a 2-furrow gang, 14-inch John Deere plow. What we plowed was timothy sod and old pasture that had not been broken up for twenty years. I consider that what we plowed would have taken eight horses, as it was so dry and hard and couch grass. We used 12 gallons of kerosene and 1½ quarts of lubricating oil per day of 11 hours.

I consider the farm tractor a long way ahead of horses when plowing timothy sod and summer-fallow. If good crop of weeds on fallow to keep down the sand.

I have had no experience on stubble, as the place we have is very sandy.

My opinion is that a tractor will soon be a necessity on every farm, seeing the scarcity of farm labor.

Yours truly,
Alexander Smith.



Another Section of Manitoba at the World's Contest

THE CANADIAN THRESHERMAN AND FARMER

CANADA'S LEADING AGRICULTURAL MONTHLY



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Nov.

A VICTORIOUS PEACE

1918

OUR GUARANTEE

No advertisement is allowed in our Columns until we are satisfied that the advertiser is absolutely reliable and that any subscriber can safely do business with him. If any subscriber is defrauded, E. H. Heath Co., Ltd., will make good the loss resulting therefrom, if the event takes place within 30 days of date advertisement appeared, and complaint be made to us in writing with proofs, not later than ten days after its occurring, and provided, also, the subscriber in writing to the advertiser, stated that his advertisement was seen in "The Canadian Thresherman and Farmer." Be careful when writing an advertiser to say that you saw the advertisement in "The Canadian Thresherman and Farmer."

WHEN Canada speaks, there is no ambiguity. Even in that wild jubilation of the streets on the 11th of November, few there were who failed to perceive its grey background of sorrow, and to lay their hearts open to God and to every fellow creature who would take part in all they felt in that supreme moment.

With more than human forbearance, those many thousands of brave, voiceless souls in Canada have met the ordeal of the past four years without flinching. To them, and most of all the women folk, the tension at times seemed to reach a point at which the last thread in mortal endurance must give way, but day in and day out they set their

faces to the grim determination to "stick it" to the end.

And when relief came like a burst of God's glorious sunshine through the pall of battle smoke, who would prescribe the limit to what, in the sheer excess of gratitude and gladness, these brave ones might have gone when the hour struck that told them their splendid men on the battle front were no longer in danger of the enemy?

Every heart will nurse its own sadness or ecstasy in this great day of liberation, but running through it all like a fugue in the swelling anthem is the indestructible spirit of gratitude and human sympathy. The people may often be wrong in their opinions, but in their sentiments they are never mistaken. The heart of Canada is sound from core to circumference.

It was the deep rooted knowledge of this fact that kept our faith in the ultimate triumph of our lads like a glowing beacon fire all through the piece. It is this same feeling that now saves

us from all fear of the future. God is in the hearts of the people, all is well with the world. The future has no terrors for the man who acknowledges Him.

Three little incidents of one hour on the street will suffice to tell what our folks

are made of. One humble preacher pasted up on the notice board of his sanctuary the words: "Thanks be to God Who giveth us the victory." (We afterwards got to know that this kindly soul spent the day in visiting every family of his congregation who had suffered bereavement through the war).

An acquaintance—one of the West's roughest diamonds—was about to meet us on the side-walk. He was one of the swearing, tearing mortals one does not care to discourse with at such a time, the kind of man we take every possible means to forget about when the heart has no call even for the companionship of the best. We tried to evade him but he held us up and his cheeks were wet with tears. He wrung our hand and with the simple words: "Thank God the boys are safe now," passed on his way.

A little stenographer lass whom we knew had no cause to break down for all she loved at the battle front had been spared to her, was nevertheless apparently the most sorrowstricken one we met that morning. In response to an expressed fear of "bad news," she cried: "O no, I can't tell you how happy I am, but I can't help thinking of—," and several dear friends were named who would not again have the joy of seeing their heroic men in the flesh. It is the spirit of such royal hearts as these that brought us the victory, that secures the future, and will never fail to keep any nation or compact of nations right before God.

The Hour's Call

Hurrah! Hurrah! up from the multitude,
That floats upon the surface stream of life,
Arose this cry for victory and peace.
But here and there among the crowd I saw
Some faces sad—Ah! these were they
Who paid the price of victory and peace.
With blood of those they loved above the joys
Of life. Like Mary at the Cross they stood
And gazed upon their best loved crucified
For human weal. They, too, had felt the sword
That pierced through Mary's soul.
Uncover here,
Ye thoughtless ones, and reverence pay to those
Who gave their sons to die that you might live
In peace and liberty. In wisdom weigh
The debt you owe, and pray for honesty
To pay. Give not untutored passion rein
To gratify unholy lust; nor eat
And drink with common glee by virtue's grave.
Give not your soul to greed of gain, nor pride;
But in this solemn hour rededicate your strength
To make this land more worthy those who died.

Frederick B. Duval

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Single copies 15 cents
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United States and Foreign Countries
\$1.50 per Year.

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All Subscriptions must be paid for in advance and no subscription will be accepted for a shorter period than six months.

Advertising copy in order to secure good position should be in our hands not later than the 15th of the month preceding date of issue.

Advertising rates furnished on application.

En-ar-co Products

En-ar-co National Motor Oil

Made by "Graduate Workmen"



Our Scientific Refining processes eliminate even the possibility of carrying residue or coke-like substances in this oil. In the making it first comes off in the form of a distillate or vapor which is condensed into a liquid and then further refined and filtered. Thus we produce an oil that is ALL OIL — oil that assures a motor's greatest strength and power.

Order now or ask for prices F. O. B. our nearest branch.

Buy it in barrels, half-barrels or steel drums or half-drums — the economical way.

White Rose Gasoline

The Powerful Motor Fuel



You can't afford to use ordinary gasoline. You want "White Rose." It has made a sensational record for dependability, power and extra energy. It gives your motor "dash" and "pep" and results in a greater satisfaction than you have ever known. Order enough to last several months. Ask for prices F. O. B. our nearest branch.

En-ar-co Motor Grease

The Grease of Efficiency



This grease does away with the need for special greases for different uses. It gives perfect lubrication for all purposes around the motor car and tractor.

Ask for prices F. O. B. our nearest branch.

Packed in convenient, 25-pound screw-top cans.

National Light Oil

Buy Your Winter Supply Now



A bright, clear light — without charred wick or sooty chimney — is assured when you use this oil in lamps or lanterns or oil stoves. Have handy a good supply of oil that insures uniform heat with no smoke, no smell, and does not leave a carbon deposit to clog wick and burner. Also best for incubators and brooders and the most economical tractor fuel.

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Black Beauty Axle Grease



Here is the best axle grease ever made. We've been making it for nearly a half century and it now has world-wide sale. Packed in useful 25-pound galvanized pails. It contains no compounds to clog and gum.

Ask for prices F. O. B. our nearest branch.

An Open Letter to the Thousands of Satisfied Users of

En-ar-co

National Motor Oil
White Rose Gasoline
Motor Grease
National Light Oil

MANY of our employees (over 80 at this date) are in our country's service. More are going. All are ready to answer the call when needed.

The majority of those who have gone were formerly salesmen and office men. Until these men return, for their positions are being held open for them, it will be impossible to have salesmen cover the territory as often as formerly.

Those of us who remain are exerting every effort to serve you well. You, too, can help. Let Royal Mail Service take the place of the salesmen who are fighting for all of us. Mail your orders direct. But —

Buy of Your Local Dealer If He Has En-ar-co Products in Stock

If He Cannot Supply You, Mail Us Your Order Direct

A mail order saves a salesman's call. It saves man power — a service our country needs.

Send your order now for goods you will want during the next three months. This will help to relieve the congested railroad traffic that is sure to come with winter weather. If your present needs are supplied, send your order for next spring's requirements and we will protect you on present prices.

We guarantee that prices will not be lower inside of one year. So do not be deprived of these highest quality goods. Order direct if unable to secure near your home.

Help Win the War

Send This Order Coupon Now!

**Use
This Coupon
If Your Dealer
Cannot Supply
You**

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1238 Excelsior Life Building, Toronto, Ontario

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nearest branch.

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.....Gallons White Rose Gasoline
.....Gallons National Light Oil
.....Pounds En-ar-co Motor Grease
.....Pounds Black Beauty Axle Grease

My Name is

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Town Province

Shipping Point

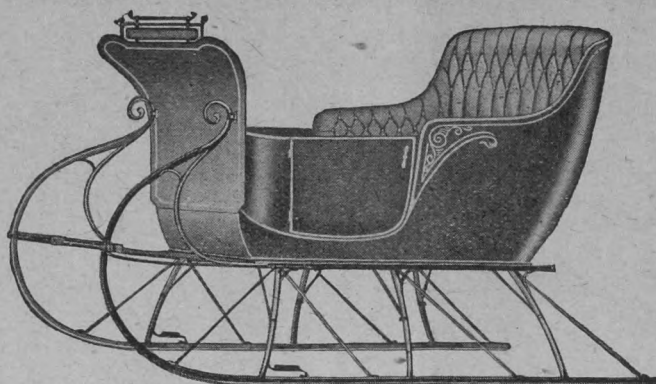
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General Offices

Toronto, Ontario

WE have a nice assortment of Brockville Cutters and Jumpers, with and without fore doors and tops, also two and three beam bobs for use with your Democrat box, and our prices are right.



Brockville Fore Door Auto Cutter

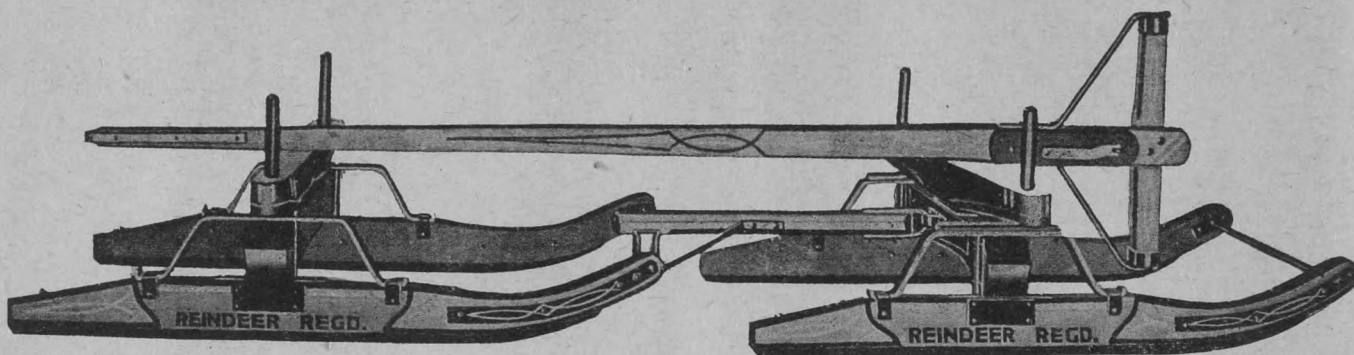
THE Brockville Cutters

set the standard for quality and style, are well proportioned and have that appearance of style and comfort so much sought after by other makers.

WE CARRY A FULL LINE OF AGRICULTURAL IMPLEMENTS

THE REINDEER (Registered) FARM SLEIGH

Guaranteed
good oak
timber
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BUILT
OF
OAK

Quality and good workmanship is quite as necessary in a Farm Sleigh as in a wagon. We know that in our "Registered" Sleigh we are offering you the best value obtainable this season. WE HAVE A SLEIGH THAT WILL PLEASE YOU.

SEE OUR NEAREST AGENT OR WRITE US DIRECT FOR PRICES, ETC.

JOHN DEERE PLOW CO. LIMITED WINNIPEG SASKATOON REGINA
CALGARY EDMONTON LETHBRIDGE

REBABBITTING BEARINGS

By E. M. D. Bracker

MANY farmers have cast aside a machine which could have been used much longer if the babbitt lining in the bearings was only renewed.

No More Dread

OF THE DENTIST'S CHAIR

Every modern scientific equipment is in this modern establishment in the hands of skilled dentists—makes the work painless.

Our work is incomparable in finish and appearance. Have you been dreading to have your dental work done? No need of it; we have scores of satisfied patients who will tell you we "DIDN'T HURT A BIT."

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Gold Bridge work, per tooth	7.00
Porcelain Crowns	7.00
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Painless extracting of teeth. Gold Fillings. Porcelain Fillings. Silver and Alloy Fillings.	

Every bit of dental work carries the Robinson stamp. When you get tired experimenting with unskilled dentists, give me a trial. Hundreds upon hundreds of testimonials from patients. I have no other office in Western Canada. Do not be deceived by unscrupulous dentists who try to make you believe they have my system. Remember the location.

DR. ROBINSON

Dentist and Associates

Birks Bldg., Smith and Portage
WINNIPEG, CANADA

The work requires such tools as a hammer and chisels, a ladle, fire pot, and a small level. If a fire pot is not available, the babbitt may be melted in some other way, although the fire should be close to where the babbitting is to be done. The ladle should be large enough to hold more babbitt than the bearing will require. This will insure getting the bearing filled with hot metal. The babbitt should be heated slowly; this may be done while the following preliminary steps are being made.

The old babbitt should be removed from the bearing. A hammer and chisel may be used for this purpose, or, if a blow torch is available, heat may be applied to the metal so as to melt it out of the bearing. When this latter method is used, the shaft should not be in the bearing. Whatever method is used to remove the babbitt, great care must be taken to get the babbitt out of the retaining holes in the bearing, as the babbitt is anchored and held in the bearing by means of these holes. The bearing and shaft should also be free from either moisture or grease, before the metal is poured, for if either of these is present bubbles will be formed in the hot metal, and, as these bubbles burst, the molten babbitt may be thrown out of the bearing with considerable force,

endangering the operator who is doing the work. If this does not happen, the bearing will be pitted with "blow holes."

Both split and solid bearings require rebabbitting, and, as the method for doing each differs somewhat, the method for babbitting a split bearing will be considered first. The two halves of a split bearing should be separated by several shims on each side. The shims are usually made of thin metal or of cardboard. It is well to have these shims of varying thicknesses, although none should be over three-thirty seconds of an inch thick; then as the babbitt wears away the upper half of the bearing should be removed. If there has been much wear, a thick shim should then be taken from each side of the bearing so that there will be the proper amount of play between shaft and bearing. Enough of these shims should be provided so that there will be sufficient space between the shaft and bearing for a good thickness of babbitt. These shims should be provided with a number of V-shaped notches if the two halves of the bearing are to be babbitted at the same time. The side with the notches in it should be placed next to the shaft and should touch it. These notches permit the babbitt to flow to the lower half of the bearing.

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Help in the Glorious Victory BUY VICTORY BONDS

We made certain that you would not be disappointed — A large amount of Victory Bonds (1918) have been reserved for us so that those who desired to take advantage of our "Ten Years to Pay" plan might do so.

We Buy the Bond for You—Give You a Declaration of Trust—Hand the Bond to You If You Live, or to Your Estate If You Die—And, You Have

10 Years to Pay.

YOU DO NOT, AND CANNOT, PAY US MORE THAN THE FACE VALUE OF YOUR BOND.

Here are our easy terms:—

\$500 Bond—\$50 a year for 10 years, or
\$100 a year for 5 years.
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\$200 a year for 5 years.

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Clip the coupon and mail it NOW, before these Bonds are all gone.

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The NORTHWESTERN LIFE

ASSURANCE COMPANY, WINNIPEG

H.R.S. McCABE, Managing Director.

WINNIPEG

F.O. MABER, Secretary.



The shaft must be placed in the center of the bearing, after the shims are in place, and it must be parallel with other shafts if there are any. The shaft may be supported in this position by blocking, or a small block of wood or a piece of leather may be placed between the shaft and the lower half of the bearing. The upper half of the bearing should not be attached, unless it is desired to pour the halves of the bearing separately.

Either putty or stiff clay should be used to keep the babbitt from running out of the ends of the bearing. It is advisable to put cardboard collars next to the bearing and then apply the putty or clay on the outside of these collars. Air holes must be provided on top of the shaft. One of these holes, having been enlarged and made funnel-shaped, may be used as a pouring hole. If the babbitt is poured through the oil hole the babbitt may be either drilled or punched out after it is cold, or the hole may be prevented from closing by inserting a nail of the proper size into the oil hole as quickly as possible after the metal has been poured. When the upper half of the bear-

ing is removed, it should be noted whether or not the oil hole is entirely open. If a single thickness of good paper is put around the shaft it will aid in securing a good, smooth bearing. Before pouring the babbitt the shaft and bearing should be warmed if cold. This may be done by applying a flame or a red hot bar of iron to the parts.

The babbitt should be hot enough to readily char a pine stick and the scum should be removed just before it is poured. If a lump of resin about the size of a walnut is added it will make the babbitt pour better and will lessen the danger of bubbles that may form in the bearing causing it to be pitted. When all is in readiness the hot metal should be taken quickly to the bearing and poured as rapidly as possible, without stopping, until the bearing is entirely filled. Allow the metal to cool a moment, remove the nuts that hold the upper half of the bearing in place, and separate the two halves of the bearing by driving a cold chisel between them. The rough edge should be smoothed off with a half-round file and small grooves cut from the oil holes to within

PURE, CLEAN WATER



AT THE PROPER TEMPERATURE

for your cattle will mean "Bigger Returns and Less Labor"

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Stock Water Troughs AND Stock Tank Heaters

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three-eighths of an inch of the bearing. These grooves aid in oiling the bearing and must be provided.

The procedure in babbitting a solid bearing is much the same as that just given for split bearings, except that the shaft should be covered with a single thickness of good paper. The paper should extend beyond the ends of the bearing and its edges should be lapped and glued. Sometimes it is sufficient to coat the surface of the shaft with soot or chalk.

PATENTS: CANADIAN, FOREIGN—
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Ship all yours to us. You can depend on honest grading, top prices and prompt payment.

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BOND PAYMENTS SPREAD OVER TEN YEARS

LAST year the Northwestern Life Assurance Company of Winnipeg introduced a novel and (as it proved to many hundreds of investors who took advantage of it) most profitable savings investment.

The idea hinged on the purchase of Victory Loan Bonds and the "Northwestern Life" added to the attractiveness of the deal a feature that not only made it irresistible but greatly increased the contributions of the saving and investing public—whether the investor figured in the circles of high finance or was simply the man-in-the-street with an odd dollar or two to spare from this weekly or monthly stipend.

This was the "Ten Years to Pay Plan," the details of which are now a matter of general knowledge. It developed into a remarkable success, so much so that the hundreds who took advantage of it are inquiring whether it is the purpose of the company to introduce the scheme this year.

The answer is a decided "yes," but not until the close of the campaign. The services of the representatives of the Northwestern Life are now under the direction of the Victory Loan Committee. The life assurance man, it is well known, makes the beau ideal bond salesman, and the committee has the enthusiastic support of the entire personnel and staff of "The Northwestern" in canvassing, where there is the remotest chance of closing a prospect.

The advice given by this company is—"Buy Bonds"—Buy to Your Limit—invest just as our boys at the front have fought. Remember that every Bond bought is a shot at the Hun—then do better still—make that share ten times as big as would ordinarily be possible by means of our "Ten years to pay Victory Bond Plan."

We strongly recommend every reader who can invest however little, to get particulars of this plan from our friends.

INCREASED ACREAGE FOR NEXT YEAR

Every effort should be made to help the farmers of Canada to put an increased area under the plow this fall. City men have helped with the harvest and success seems to be assured. City men must help out in cases where farmers find labor scarce for fall plowing. Men, now in cities, who have worked on farms, and can handle horses, should render themselves available for this important work.

WIN

\$ 2500.00

in

GRAND PRIZES

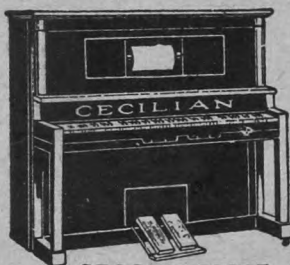
This Magnificent
CHEVROLET
TOURING CAR



First Prize *Value* **\$935.00**

Which of these World-Famous Proverbs fits this Picture?

The hypocrite's hopes shall perish.
Hasty climbers have sudden falls.
He that sows iniquity shall reap sorrow.
Peace begins where ambition ends.
Where villainy goes before, vengeance follows after.
Foxes come at last to the furrier.
Big heads have big aches.
Who takes up the sword shall perish by the sword.
Punishment follows close on the heels of crime.
To the wicked, misfortune comes triple.
Force can never destroy right.
The wicked shall not inherit the earth.
The punishment shall fit the crime.
Evil conduct is the root of misery.
Ill deeds heap on thy soul.



SECOND PRIZE
World-Famous Cecilian Player Piano. Value \$800.00



THIRD PRIZE
Beautiful Brunswick Phonograph. Value \$241.00



FOURTH PRIZE
Lovely Shetland Pony. Value \$100.00

TWELVE proverbs prophesy the downfall of Germany in this Great War. Some of them were written centuries ago, others are of more recent origin, but they all point the same way—to the destruction of arrogance, tyranny, villainy, vice. We have represented these twelve proverbs by twelve pictures without the titles. \$2,500.00 in grand prizes can be won by those who can fit the correct proverb to each picture.

How to Enter this Great Contest

Only the first of this series of proverb pictures will be published in this paper. It is shown on the right, and a clue to it may be found in a list of a few of the Hun Beating Proverbs opposite. Write out your answer to this proverb picture No. 1 on a sheet of paper with your name and address and mail it to us to-day. If it is correct we will write and tell you so, and you will receive by next mail

FREE Our fine 48-page book of Hun Beating Proverbs and the series of 12 Proverb Pictures completing the contest

The publishers of Canada's Greatest Monthly Magazine are conducting this great contest. Therefore contestants are assured of its absolute fairness and squareness. In order to give an equal chance to every competitor they have published a fine book of Hun Beating Proverbs, and all the proverbs represented by the series of twelve pictures have been chosen from this book. Answer proverb No. 1 correctly and this fine book will be mailed to you free. With it you will receive the complete series of twelve proverb pictures which complete the contest. Thus, there will be no waiting or delay. All the pictures will be presented to you at once and you can set to work to find the answers that can win you your share of these wonderful prizes.



PROVERB PICTURE No. 1

FIRST PRIZE

Magnificent Chevrolet Touring Car
Value \$935.00, and Over \$1,500.00 in Other Grand Prizes

The other Magnificent Prizes in this contest surpass anything ever offered in Canada heretofore. They include:

World Famous Cecilian Player Piano, value \$800.00; Beautiful Brunswick Phonograph (plays all records), value \$241.00; Singer Sewing Machine, Frantz-Premier Vacuum Sweeper, Waltham Watches, Lovely Shetland Pony, Furniture, Kitchen Cabinet, Stoves, Books, C.C.M. Bicycles, Electric Cooker, and Many Others

Big 16-Page Illustrated Prize List Will Be Sent To You Free It Shows All The 75 Grand Prizes That Will Be Awarded

THIS CONTEST IS ABSOLUTELY FREE OF EXPENSE

This is the fifth great annual contest conducted by the Continental Publishing Company, Limited, one of the largest and best-known publishing houses in Canada, whose name and reputation is your guarantee of absolute fairness and squareness in the awarding of the prizes. Frankly, it is being conducted with the object of further advertising and introducing Everywoman's World, Canada's Greatest Magazine, but you can enter and win the best of the prizes whether you are a subscriber or not. Moreover, you will neither be asked nor expected to take the magazine nor spend a single penny of your money in order to compete. A free copy of the current number will be sent to you without charge, because we want you to know the new, improved Everywoman's World, and the only condition attached to entry is that you help us in this great advertising campaign by showing your copy to just four of your friends or neighbours, who will appreciate this worth-while, all-Canadian magazine, and want it to come to them every month. This simple favor you will easily fulfil in a few minutes of your spare time in order to compete for your share of these wonderful prizes. We will even send you copies for each of your friends if you wish.

OTHERS HAVE WON BIG PRIZES SO CAN YOU

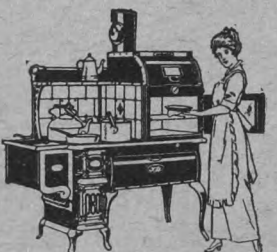
Here are the names of only a few of the big prize winners in previous contests, to whom we gladly refer. More than \$100,000.00 in other grand prizes and awards have already been given—Man.; Ford Touring Car, W. E. Geddes, Kilmarnock, Ont.; Ford Touring Car, S. E. Waddell, Ottawa, Ont.; Ford Touring Car, Hugh A. Ross, Smith's Falls, Ont.; \$450 Piano, Mrs. Florence Clark, Montreal; \$450 Piano, Mrs. Chas. Stafford, Calgary; \$300 Cash Prize, A. de LaRiviere, St. Polycarpe, Que.

NOTE THIS AND SEND YOUR ENTRY IN TO-DAY. THIS IS THE OPPORTUNITY OF A LIFETIME
Don't hesitate. Don't delay. Send your answer to Picture No. 1 to-day and get all the Proverb Pictures completing the contest, and the Hun Beating Proverb Book. You can win the auto or your share of the big prizes if you try. According to the rules, contestants may send as many as three answers to each picture, if they desire, so if you are in doubt as to the correct proverb to fit Picture No. 1, you may send two extra solutions. Send your answer to

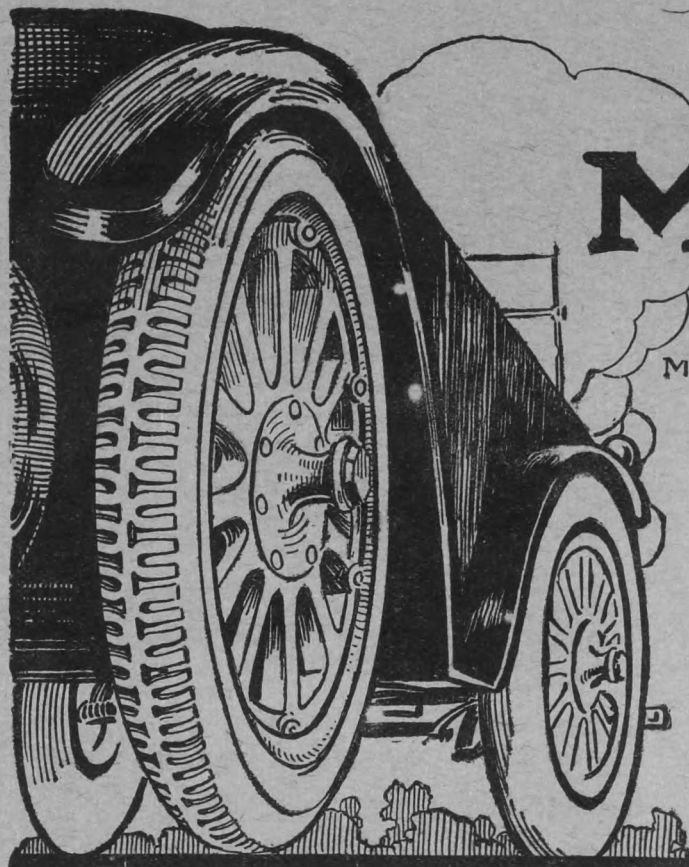
WAR PROVERB EDITOR, CONTINENTAL PUBLISHING CO., LTD. 226 CONTINENTAL BUILDING, TORONTO, ONT.



SIXTH PRIZE
Famous "Hoosier Beauty" Kitchen Cabinet



FIFTH PRIZE
Clare Bros. Famous High Oven Range. Value \$75.00



Maple Leaf TIRES

MADE IN CANADA WORTHY OF THE NAME

HERE is a totally NEW departure in selling tires—
Non-Skids at the same price as Plain Treads.
You pay the same price for either when you
insist on the sturdy Maple Leaf Tires.

Maple Leaf Tires are built to meet the growing
demand for good, standard tires of warranted quality,
at an attractive price. Made in standard sizes.

Ask your dealer for Maple Leaf Tires.

DEALERS: Get particulars from your jobbers.

JOBBERS: Write to us for prices and terms.

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EXTENSION SCHOOLS IN AGRICULTURE AND HOME ECONOMICS

We reprint the following extracts
from a wonderful little bulletin just
issued by S. T. Newton, Director, Ex-
tension Service, Manitoba Department
of Agriculture, and which we strongly
recommend every seriously interested
person to send for.

THE past ten years has been
a period of such rapid de-
velopment along industrial
lines that it has been found very
difficult for educational systems
to readjust themselves quickly
enough to meet these changed
conditions. In every industry
there are groups of people who
keep fully abreast of the times,
and agriculture claims a greater
number of these progressive peo-
ple than possibly any other indus-
try. Thus it has become necessary
to provide a means for taking to
the people living in the rural dis-
tricts the latest results obtained
from the Experimental Farms, the
colleges and from other progres-
sive farmers. The means employ-
ed up to the present have been
special lectures, institute meet-
ings, agricultural trains and ex-
tension schools. Of all of these
plans, the one that seems to have
met with the most approval is the
extension school, and between
forty and fifty will be held during
the coming winter.

In organizing extension schools
no attempt is made to cover the
whole range of subjects; instead,
those subjects are chosen on
which the people living in any
community consider there is the
greatest need for instruction. Last
year it was gas engines; this year
it may be field crops, and next
year something else. Whatever
subject is chosen, use is made of

the short unit system, which has
been found so effective in indus-
trial training.

What Is Meant by the Short Unit System?

In the short unit method of
teaching, every subject is care-
fully analyzed and divided into
separate units, each one of which
is complete in itself and can be
taken by the student with profit
to himself, even though he may
not have been present when the
preceding units of the course were
being studied.

By eliminating all unnecessary
preparatory work, and all work
that does not apply to the specific
subject to be taught, and by mak-
ing the programme as flexible as
possible, the needs of a very large
number of people in the com-
munity can be met, and a remark-
ably large amount of work can be
covered even in a brief period of
time.

This is accomplished (1) by
making the unit so small that it
can be completed in the time
given, (2) by dealing with one
specific thing at a time, (3) by
making the instruction as practi-
cal as possible, (4) by applying it
to local conditions.

The fact has been frankly ac-
cepted that in times like these,
there will be many who will be
able to attend only at irregular
intervals, and it will be a great
boon to them if they are permitted
to attend when the particular
phase of the subject in which they
are interested is under consid-
eration. For instance, one farmer
may have trouble with his mag-
neto, and will plan some way or
other to be on hand when this
topic is taken up. Another may
want information on methods
which have proved effective in

: BUY VICTORY BONDS :-



Victory at Last to Shippers of RAW FURS

Every good business man goes where he can get quality at the
cheapest price, and he always sells to the best market. Do
you know, Mr. Shipper, that 80 per cent of the furs of the
American Continent are manufactured in New York? No mat-
ter where you sell your furs, be it Winnipeg or St. Louis, or
anywhere else—your furs ultimately go to New York. Why
not eliminate the middleman's profit and get the prices paid in
New York?

We have been in business thirty years. Our head office is in
New York. We have hundreds of manufacturers to whom we
constantly ship raw furs no matter whether prices are high or
low.

We have opened a branch in Winnipeg and will pay you New
York prices in Winnipeg.

There never will be a better opportunity for you to prove out
our successful methods than this season. The market on all
furs is high—never higher. We want
your furs and you can get good results
by shipping to us direct.

Dealers, Lots a Specialty

We will send a man
to give you a price on
your furs if you have
large quantities.

Highest prices paid for beef hides, sheep pelts
and seneca root.

Write to-night for price list and tags direct
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preventing soil drifting, and still another may want instruction in animal breeding. We naturally feel that it will be well worth while for every one in the district to take in the whole course, but yet we recognize that as the majority of those who will be in attendance are mature workers, they will have a better idea as to their needs than we have and should be permitted to select from the work of the school the parts which will best meet their needs.

Instructors

In the gas engine courses, the instructors chosen have had a wide experience in the subject taught, their summers having been spent in practical work in repairing and operating gas engines. The instructors in the agricultural subjects are nearly all Agricultural College graduates, who also have practical first-hand information on farming.

In home economics the instructors, in addition to having good technical training, have had several years' experience in commercial establishments.

Courses Offered

The short course schools that have proved the most satisfactory for Manitoba conditions are, first, those extending over a period of ten days, and, second, those completed in four or four and one-half days.

The ten-day schools open on Tuesday morning and continue until Friday at noon on the following week, Friday afternoon being utilized in loading machinery and other equipment. The four-day schools open at noon on Monday if the instructor can reach the town in time, by leaving Winnipeg either on Sunday evening or Monday morning; otherwise they open on Tuesday morning and close on Friday evening. It will, however, save considerable time if those who are in charge of the school will arrange for a considerable number of the prospective members of the class to meet with the instructor on Monday evening to decide on the materials, etc., that will be needed on the following day.

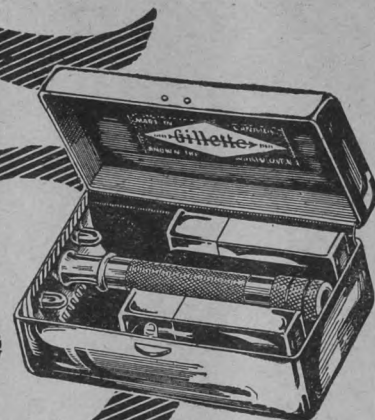
Ten-Day Courses

Gas Engines, Live Stock and Field Crops.
Farm Cost Accounting.
Agricultural Woodworking.
Dressmaking and Millinery.
Dressmaking, Cookery and Home Nursing.
Sewing for school girls for July and August.

Four-Day Courses

Dairying and Poultry Raising.
Dairying and Bee Keeping.
Gardening and Poultry Raising.
Farm Crops and Soils.
Dressmaking and Tailoring.
Millinery and Flower Making.
Cookery and Canning.
Home Nursing.

The Gillette Razor Still \$5



How many of the every-day needs can you buy now as cheaply as before the war? Clothing has gone up; food has gone up; coal is almost a luxury; and war taxes have nearly doubled the price of tobacco and matches.

But the Gillette Safety Razor still costs the pre-war price—five dollars.

There has been no advance, though wages, materials, and the hundred and one items entering into the making of a Gillette Razor have soared.

Increased Output Keeps Down Cost

New and improved processes have helped to lessen production costs, but the big factor has been increased output. Light, power, supervision, and other "overhead costs" remain very much the same whether the factory is run to capacity, or not.

Our great objective, then, was to increase the output so much it would offset the advance in wages and materials.

Here is the interesting thing. War, which increased the cost of labour and materials, also provided the increased demand.

The Allied armies are literally a vast congress of Gillette users! Where we sold one razor in 1913 we now sell more than ten. The production of Gillette Blades has increased in even greater proportion.

Many people with friends at the front buy Gillette Blades in carton lots and slip a packet into letters going overseas—some are bound to escape the submarines and other perils of war.

Five dollars is still the price, and figured out on the basis of years of service, the Gillette provides about the most inexpensive enjoyment the average man can have.

The richest man alive cannot buy better shaving service than the five dollar Gillette will give you.

Gillette Razors and Blades may be purchased from Jewelers, Druggists, and Hardware Stores throughout Canada.

GILLETTE SAFETY RAZOR CO., OF CANADA, LIMITED,

Office and Factory: 65-73 St. Alexander St., Montreal.

384

How to Secure an Extension School for Your Community

Any local organization, such as the Agricultural Society, Home Economics Society, Grain Growers' Association or School Board, may take the initiative in arranging for an extension school. But membership in such organizations must not be one of the conditions imposed on a prospective student. The school should be self-supporting, and members and non-members of any organization should pay the same fee.

Suppose, for instance, that the Agricultural Society takes the initiative. Some one at a regular meeting of the society should explain the scope of the proposed short course, and if there is con-

siderable interest shown a general meeting of the whole community should be called, and the secretary of each of the other local organizations advised of the meeting and asked to invite the members of his or her organization.

At this meeting the scope of the course is again explained, and if there is a desire to go ahead with it a local board of management is elected, and in electing these officers, the personnel of local organizations should be kept in mind, and an effort made to see that each is represented on the committee.

Synopsis of Courses

Studies in agriculture and gas engines go well together. At the beginning of the course everyone

wants gas engine work, but before the end of the series of lectures, fully as much interest is taken in live stock and field crops.

This course opens on Tuesday morning, and continues until Friday at noon on the following week. For instruction purposes, a car load of equipment is provided, consisting of one, two and three horse power gas engines, one or two small tractors and one or two sectional engines showing more clearly the construction and operation of the more difficult parts to understand. A good supply of magnetos, carburetors, coils, transmissions, lecture charts etc., are also provided.

As there is always a big demand for instruction on the repair and

operation of tractors, definite arrangements for the course should be made early enough to permit several tractors being brought in from nearby farms. The owners of these tractors will find it worth while to loan them, as it is generally found that the connecting rod bearings are loose. Carbon requires to be removed from the cylinder and the valves ground. Magnetos and carburetors usually need attention, and a number of bearings will need babbiting. Small stationary engines out of repair should also be brought in, and they can generally be put into running order by the owners, under the direction of the instructors.

Gas Engines

- (1) Types of engines;
- (2) Ignition, jump spark and make and break;
- (3) Carburetors and mixing valves;
- (4) Lubricating and cooling systems; oils, greases, etc.;
- (5) Locating trouble and repairs;
- (6) Transmissions;
- (7) Valve grinding and setting;
- (8) Assembling and disassembling;
- (9) Types of tractors and their adaptation;
- (10) Comparative cost of power—
 - (a) Small tractors
 - (b) Large tractors
 - (c) Horses

WHY SOIL BECOMES SOUR

By H. J. Wheeler

HOW can this sour-soil condition be avoided? It arises from several causes: The alkalinity may have been reduced by cropping the land without liming; the decaying process of the green roughage, manure and other organic matter turned in, and the excretions of the plant roots, may all have helped to set up the acid condition.

The acid condition has sometimes been charged to the continued use of chemical fertilizers, but the scientific men have exploded this theory. Dr. Wheeler, formerly director of the Rhode Island Experiment Station, says:

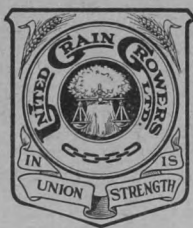
"It is well established that if a soil to which superphosphate has been added remains quite moist for a considerable length of time, the sulphate of lime which is associated with the superphosphate may be partly changed to carbonate of lime within the soil by processes of reduction. When this occurs, the carbonate of lime which is formed will naturally tend to lessen the acidity of the soil.

"Recently Prof. S. D. Conner and his fellow workers at the Indiana Agricultural Experiment Station have shown that acid soils and silicates after receiving acid phosphate were less acid than when they were untreated. They

believe this is due principally to the reaction of the phosphoric acid upon acid salts of aluminum.

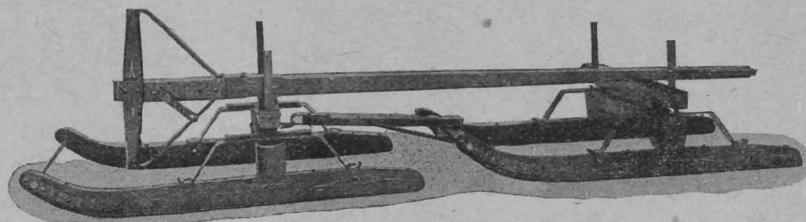
"Director Brooks, of the Massachusetts Agricultural Experiment Station, has conducted field experiments with superphosphate covering a period of many years. He states that 'no injurious secondary effects are known to be associated with any reasonable use of dissolved phosphates.'

"This question has been studied likewise by Prof. B. H. Hite, of West Virginia University. He has tested hundreds of samples of soil from various parts of West Virginia and reports that three-fourths of the sour soils and practically all of the sourest soils in that state have never had fertilizer.



Haul Heavy Loads With Safety

The time to buy your sleigh is **NOW**—before the heavy demands on winter hauling commence. There is satisfaction in buying from United Grain Growers because of their guarantee and large purchasing power. This sleigh is of the high quality of other U.G.G. goods.

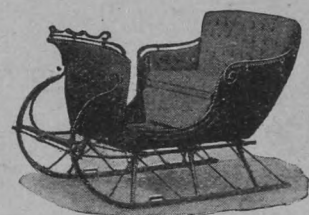


U.G.G. Sleigh

The specifications on these sleighs show that quality has been the main point in their manufacture. Thoroughly ironed and reinforced for heavy use. Built so they track right, stay on the road and are easy pulling. With 2-inch steel shoe it is priced at Winnipeg **\$37.30**. Correspondingly good values in the 2½-inch size, and in both sizes with cast shoes.

There is Style and Comfort in U.G.G. Cutters

The 1918-19 U.G.G. cutters have that touch of quality which makes them safe buying. Every part is built to give long service and hold its shape for many seasons. Easy running—comfortable riding—smart style—these are points you are sure of in U.G.G. Cutters. The open cutter shown with shafts is priced at Winnipeg **\$60.75**



We also have this cutter with storm doors and blizzard top. Ask about it.



WINNIPEG

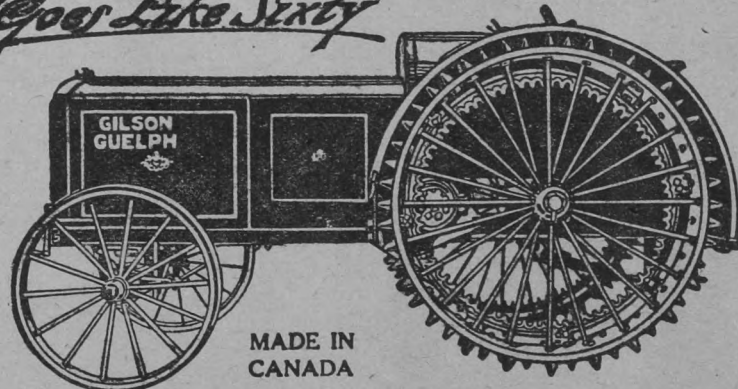
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Goes Like Sixty



THE 100% Service Tractor that does all the things you want a tractor to do. Great power, compact construction,—extra strong and durable, but light and handy. It has great drawbar pull and economy,—and for belt work it is unsurpassed. Built of the finest materials,—Hyatt Roller bearings,

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The Gilson Standardized Tractor meets perfectly the demand for a high class, serviceable tractor to increase production, and is a money-maker for its owners. Sizes 12-25 and 15-30 h.p. Write to-day for full particulars.

GILSON MFG. CO., Limited, Dept. R, WINNIPEG, Man.

THE COLLEGE REPLIES TO "THE PROFESSOR ABROAD"

SOME observations by "The Professor Abroad" in the Canadian Courier of October 26th on the "New Agricultural College at Winnipeg call for a brief comment:

"The parks are beautiful, and though past the middle of September there were enough flowers in bloom to make, with the beautiful autumn foliage, a picture I shall not soon forget. Great open spaces well cared for, animals not cooped up in small enclosures, but as nearly as possible in natural surroundings, and a general policy of non-interference with Nature except in the matter of good roads, speaks well for some far-seeing 'City Father,' who must have championed the cause of the people.

"But of the other opportunity for wonder and admiration let me say but little. It is not admiration that is evoked, but amazement that there should be in a province noted for its agricultural possibilities a group of buildings which reveal in every possible way extravagance and the influence of the city as contrasted with that of the country. It beggars description, and I was not surprised to hear that few of its students 'return to the land.' The contrast could hardly be greater.

"These, then, are two of the impressions upon the wandering professor in the days spent in Winnipeg. It was pleasant to see in the spacious and home-like Fort Garry Hotel, at the luncheon of the Canadian Club...."

"Abroad" is good. My father was in the habit of using that term when speaking of a certain mental state. "All abroad" in the language of the Cornishman means the same as "non compos mentis" in the language of the Oxonian. The professor was very much abroad when he thought he was attending a meeting of the Canadian Club at the Fort Garry. He was abroad either when he visited the Agricultural College, or when, in the spacious home-likeness of the Fort Garry or the Macdonald, he tried to recall his impressions of that visit. He is all abroad alike in his praise of the parks (!) at the college, in the simple credulity with which he accepts the hoary fallacy that agricultural college students do not go back to the land, and in his Philistine misunderstanding of the spirit of the place.

Parks at the Manitoba Agricultural College! We only wish there were, but as there are not we do not care to concede to the professor abroad even that opportunity to damn the institution with faint praise. There is a fringe of trees along the river, a few

clumps of small shrubs about the grounds, a few scattered trees of indigenous growth, a nursery of several hundred young trees for transplanting.

And that venerable fiction indulged in by all those who are ill-disposed to agricultural colleges, the delusion that their students do not return to the farm! No one who has taken the slightest trouble to discover the facts could be guilty of repeating such an obvious untruth. One might say much to justify agricultural colleges even if a large proportion of their students did not follow farming. But the figures all point the other way.

"Evidence that he is a 'wandering professor' in more than the geographical sense is found in his misreading of the character of the place. It revealed to him 'the influence of the city as contrasted with that of the country.' Like the Philistine in Goethe's 'Gedichte,' he views the temple from the market without, and sees a picture dim and distorted. Let him but come within, and a majestic brightness touches the heart. The Philistine views the agricultural colleges only as means provided for teaching clodhoppers how to plow and to sow and how to be chambermaids to prize Holsteins. Naturally from such a Philistine point of view the splendid equipment of the Manitoba Agricultural College must seem ridiculously incongruous. In the same issue of the Courier are set forth the aims of the western women for bettering country life:

To make farm life more attractive, thereby keeping the young people on the farm.

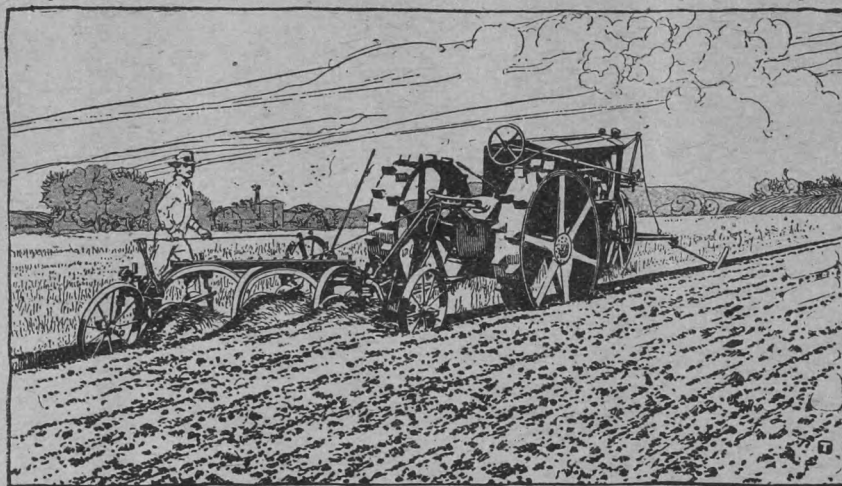
To increase the efficiency of the home-keeper and raise the ideal of home life and work.

To foster and develop local taste for music, literature and the finer things of life generally.

If these are the approved aims of the leading women living in the country places in the west, the agricultural colleges cannot be far astray when, in addition to the technical training in agriculture and home economics which they give to the young men and women from the country, they try to support these same approved aims. One should not expect the "professor abroad," the Philistine on the outside, to understand these aims, but those who have been within know and understand. What he saw with uncomprehending eyes, begging description, was the means, appointed by men more discerning than he, for teaching young people not only how to make a living on the farm, but also how to live in the country.

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How Costly Drag is Eliminated

EVERY pound of needless weight or "drag" on your plow shortens the day's work and adds to the cost doing it.

J. I. Case tractor plows are the result of over forty years of specialized plow building experience. In these plows costly "drag" and landside pressure are eliminated. All the weight of the plow is carried on the three wheels, which are equipped with the well known J. I. Case dustproof, long distance, easy lubricating axles. The plow RIDES. It does not drag. The result is a big gain in acres plowed per day and a big cut in cost of operating the tractor.

There are many other important features about J. I. Case Tractor Plows that mean better work and more work at less cost. See your local J. I. Case dealer or write us.

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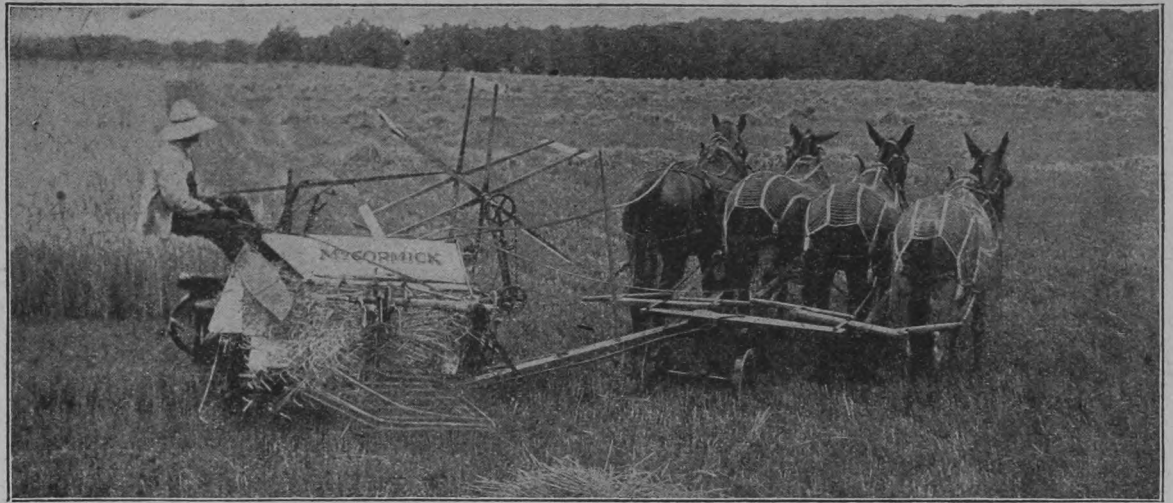
IF you have been growing grain for any length of time, you know how few your chances are of coming to the harvest with the grain all standing, easy to cut and bind.

A bad year, when the grain is down, lodged and tangled, or when the stand is uneven, is the real test of a binder. The farmer who faces difficult harvest conditions with a McCormick binder is the man who gets his grain cut and bound in the shortest time and with the least loss because—

The McCormick reel has a wide range of adjustment. It can be moved forward and down to pick up grain that is lying almost flat on the ground.

The platform can be tilted to cut stubble as short as three-quarters of an inch without running the guards into the ground.

The elevator floats one and one-half inches, giving ample capacity for the heaviest grain, yet handling light grain perfectly without adjustment.



The McCormick binder will handle grain two inches longer than most binders and will tie grain of almost any length around the center of the bundle.

These are only a few of the many features that have been developed by the builders of McCormick binders in over three-quarters of a century of practical experience. The same high standards of quality and usefulness apply to the rest of the McCormick line, the reapers, mowers, rakes, side delivery rakes and tedders, hay loaders, sweep rakes and stackers. The McCormick local agent can supply you with any of these machines. See him, or write the nearest branch house listed below for full information.

International Harvester Company of Canada, Limited

BRANCH HOUSES

WEST—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.; Lethbridge, Alta.; N. Battleford, Sask.; Regina, Sask.; Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask.
EAST—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; Quebec, Que.; St. John, N.B.

"A REVELATION"

St. Agathe, Man., Jan. 28, 1918.

Dear Sir:—

Your letter of the 17th inst. to hand requesting to know something of my experiences with the tractor. In reply, I beg to submit the following remarks:

The tractor problem is a very broad one in its various phases, and while it may be very useful and even indispensable under certain conditions it may, on the other hand and under other conditions, be an extremely doubtful investment.

When we settled on our farm



Tommy: "Well, I'm blowed. That's a funny kind of letter to send to a bloke, Jock."

Jock (regarding blank sheet just come by post): "Naething funny about it. It's fra ma wife; her an' me's no speakin' the Noo."

in the Red River Valley 27 miles south of Winnipeg and 3 miles from the Red River, on the banks of the Rat River, which is a tributary to the Red about nine years ago, we found a virgin soil, not of prairie but of scrub oak, willow and poplar, so thick and heavy that we couldn't see 30 feet ahead in places. Luckily I got a good burn on this land the first year, which helped to do away with the growth of brush. During the first summer, we were busy clearing land and grubbing roots to prepare the land for breaking and I managed to get a small piece broke the same summer. The following two or three summers we continued the programme of the first, clearing and breaking the land which was easiest to break—that is land where the oaks were thinnest. Sometimes we would work hard all day, two men and six horses, and the best we could do would be about one acre. The breaking would have to be done when the land was fairly wet, otherwise a comparatively small oak root would stop the plow and then our only recourse was to introduce ourselves to the axe and grub-hoe until we had that root grubbed out.

About this time the "Jumbo" brush plows were put out, and the following year, 1913, I purchased a Rumely 30-60 "Oil Pull" and

two 24-inch "Jumbo" brush plows. It was a revelation to walk behind the big brush plows, and watch the big oak roots turned out after having plowed them with horses. I found that we could break scrub land with the engine for about \$2.00 per acre fuel expense, which would cost about four or five times that much to grub, and still leave the arduous work of breaking with the horses to be done. The first summer we broke about 200 acres of brush land, and in the fall disked it with three 10-foot double disks. The engine handled the disks easily, and made a good job. I also used a 10-furrow John Deere engine gang and plowed about 200 acres of stubble. The fall was very dry and plowing with horses was a stiff job, but the engine handled the ten plows and four sections of harrow with ease, burning about three gallons of coal oil to the acre and three gallons of cylinder oil per day. I think we averaged about 25 acres per day, as some of the plowing was on short turns. Altogether, our first summer's work was quite satisfactory.

Since that time, I have done considerable breaking and plowing each season, and naturally have learned some things by my experience. In the first place, my engine is heavy—14 tons. Our land varies from a

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ALL the money for you. Silberman now buys direct from trappers. So get started shipping quick for big money. Try us and see for yourself.

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"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable. Write today for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

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very mellow black loam on the ridges to a clay loam in the lower loam in the lower land with a clay subsoil over all. I find that the drier the ground the better the work and the less fuel it takes to do it. Very seldom can any work be done in the spring in connection with preparing the land for that year's crop. I have disked fall plowed land in the spring for oats and barley, but the land is packed too much in the wheel marks, and unless a wet season ensues the land is sure to take and leave strips of weeds and thin grain through the field. I have plowed summer-fallow in the early summer, however, with good success.

Last summer I completed a 90 acre piece of summer-fallow in the 9th of June, which we plowed in three days on three barrels of coal oil at a cost of about 30 cents per acre fuel expense and pulled five sections of harrow besides. This is about the cheapest plowing I have done.

Aside from the heavy work of breaking scrub, I believe the beauty of a large outfit which is kept in good repair lies in its ability to do a big piece of work in a short time when soil conditions are just right.

I have been operating a 36-56 Red River Special separator the last three falls and for threshing I do not think a steadier or more reliable power than the Oil Pull can be found. It has ample power, and keeps the same steady speed whether the separator is running idle or being fed to capacity. I have, of course, moved portable granaries and other small buildings, but have never moved anything very large. If the footing is good, however, it will take a pretty heavy building to "stick" the engine. In fact, it will pull anything reasonable, as I have several times parted a three-quarter inch cable on a steady pull when breaking in the stumps.

Last fall I installed a lighting plant, consisting of a storage battery and generator, with auto headlights front and rear, and a portable trouble lamp. This enabled us to work a longer day during the fall plowing. Next fall I will try, if possible, to plow at night when threshing at home and thus get a good start on my fall plowing before threshing is over. We nearly always have a spell of good weather during the early part of threshing, and if we watch our opportunities closely I believe we can nearly always manage to get the land turned over early and so get it in shape to get the benefit of any fall rains.

I believe the new small tractors of reliable make will fill a long-felt want, enabling a man to accomplish far more work in a

shorter space of time than he can with an outfit of horses. Of course, he must possess some mechanical ability and be willing to devote somewhere near as much time to the upkeep of the tractor as he would to the same number of horses it would take to replace the tractor. These small tractors should be able to do general farm work of all sorts, as they would pack the land very little on account of light weight. For heavy brush breaking, however, they would be of very little use.

Yours truly,
M. S. Fossum.

MAXIMUM OF LABOR WITH MINIMUM HELP

Foremost, Alta., Feb. 1, 1918.

Dear Sir:—

Replying to your inquiry of Jan. 19 concerning tractor, I have the following to offer:

My tractor is a 30-60 Rumely Oil Pull. I have plowed, disked, harrowed and drilled, and all in one operation with it. The type of plow used is a P. & O., separate levers, 8-plow gang.

The average number of acres plowed per shift, covering a period of thirty working days was 15 acres. During this period 200 acres of flax were seeded by pull-in disks, harrows, and drill behind the plows. This operation of course cut down the number of acres per day, or else our average would have been greater. A little time was lost on account of rain and repair work, but I have not deducted this time in my calculation, as 450 acres of ground were broken during a period of thirty continuous working days. The average number of hours worked per day was ten.

I have done some disking and threshing with the engine, but the nature of this was such that any statement regarding it would be misleading. I might say though, that the disking I did myself at an actual cost for fuel and supplies of 30c. per acre for double disking.

Last year I broke about 640 acres and double disked about 300 acres.

Breaking could not be done in this locality after the fore part of July, as the ground was too dry.

The tractor certainly enables one to do the maximum amount of labor with the minimum amount of help. Labor not only high, but it is scarce, so it would seem that the farmer by using the tractor where he can instead of horses is not only getting his work done cheaper, in case he is farming a large amount of land, but is also doing a service to the government by getting along with less help.

Yours truly,
R. L. Kilpatrick.

ON THEIR MERITS ALONE

There must be some good reason why so many hard-headed business men, when requiring insurance for business purposes, apply to The Great-West Life "Sentiment" has nothing to do with the choice—The Great-West Policies are chosen on their merits alone.

LOW RATES AND REMARKABLY HIGH
PROFIT RETURNS ARE THE REASONS.

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25 Cent Bottles at all Dealers

WE BUY OLD FALSE TEETH

Don't matter if broken. We pay up to \$85 per set, also actual value for OLD GOLD, SILVER, PLATINUM AND DENTAL GOLD. We send cash by return mail and hold goods for 15 days for sender's approval of our price. Mail to

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It will be to your own convenience to buy nearest to your home. We make the slip or solid socket, also fibre legs. Write for descriptive booklet

CALGARY ARTIFICIAL LIMB CO.

E. 605 1st Street, Calgary, Alta.

The Victory Loan and Farm Prices

Prices of Canada's farm products are fixed, in a large measure, by the demand in Great Britain.

The price of all is governed by the price of the part exported.

Canada has a big surplus of food to export.

It is of prime importance to Canada that the market for that surplus be maintained.

To the farmer, it is of vital importance.

To-day Canada can export only as much of her produce as she can finance. Why is this? Because Britain and her Allies must buy where they can get credit. Canada then, must pay the farmers for their produce and turn that produce over to the Allies on credit. Or lose her export market. If Canada cannot pay the bills, the surplus farm produce will stay in Canada—unsold.

Last year's crop was financed by the Victory Loan 1917. Canada borrowed from her people enough money to give Britain the credit she needed. The result was that every Canadian farmer had a market at good prices for his entire crop.

This year's crop must be financed in the same way—by the Victory Loan 1918.

Victory Bonds are, as every shrewd investor knows, an investment of the highest class. The interest rate is good and the payments regular. The security is undoubted and the bonds may be readily turned into cash in case of need.

But to the farmer Victory Bonds have an even greater importance, for in addition to being an investment they will maintain a market at good prices for the crop he now has to sell.

It is therefore, to the interest of every farmer to buy Victory Bonds, to influence his neighbors to buy and to spare no effort to make the Victory Loan 1918 an overwhelming success.

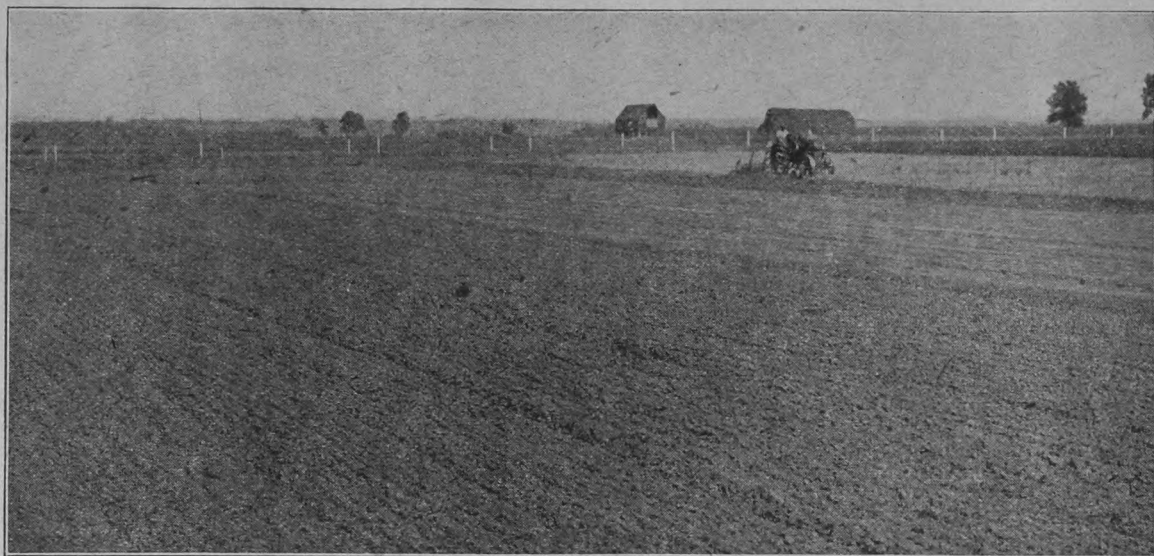
Be ready to buy Victory Bonds

The Seed Bed Counts

A VERY successful Canadian grain grower in a "Better Farming" talk at a recent tractor demonstration made a remark that seems to be worth passing along. "I wish," he said, "that the thought might be driven home to every Canadian farmer that he can do something more than hope for a crop when he is planting his grain."

"So many seem to have the idea that the weather is the only controlling factor in the making of a grain crop. Never was there a greater mistake. The man who fertilizes his fields, keeps the weeds down, makes the right kind of a seed bed, and plants his seed right, will get a better crop every season than his neighbors who do not do these things, unless, of course, the weather utterly destroys all the crops."

"The farmer's one chance to influence the success of his crop is when he is preparing the ground and planting the seed. When he has but one opportunity, it is surely a mistake to make the wrong kind of a seed bed when the right kind will discount bad weather conditions, or to plant seed the wrong way when the right kind of planting will so surely increase the yield from every



planted acre. I have grown wheat for years, and I can testify to the value of fertilizing, making good seed beds, and planting seed as it should be planted."

Just what is the right kind of a seed bed for your acres we cannot say without seeing your farm and talking with you. But—no matter what soil conditions you may have to meet there are tillage implements—disk harrows, drills, spring and peg-tooth harrows, and cultivators—in the Deering line that will do your work as it should be done. The Deering local agent can supply you. Don't take any unnecessary chances with your grain crop when a few dollars invested in the right kind of tillage tools will turn those chances in your favor.

International Harvester Company of Canada, Limited

BRANCH HOUSES

WEST—Brandon, Man.; Calgary, Alta.; Edmonton, Alta.; Estevan, Sask.; Lethbridge, Alta.; N. Battleford, Sask.; Regina, Sask.; Saskatoon, Sask.; Winnipeg, Man.; Yorkton, Sask.
EAST—Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; Quebec, Que.; St. John, N.B.

CONVINCED ANY FARMER MAKES MISTAKE WHO IS NOT USING A SMALL TRACTOR

Ardrossan, Alberta, Jan. 24, 1918.

Dear Sir:—

My tractor is a Titan 10-20, burning kerosene.

I have plowed, broken, disced, harrowed, reaped, ground grain, threshed, marketed grain, sawn wood, pulled trees and stoned with the tractor.

In plowing we use 3 14-inch stubble bottoms, P. and O. The depth is between 6 and 9 inches. The soil is all a heavy black sandy loam, easy to work. Every hour of running time on level ground the tractor plowed one full acre and harrowed it. In that hour the tractor used one-eighth gallon of lubricating oil at 61c., and one and one-quarter gallons of kerosene at 23c.

The tractor pulls for us two 7-foot disc harrows, opposite throw, and three sections of common spike tooth drag harrows.

You ask for some fuller information, and I will try to give you a somewhat garbled opinion. I am absolutely convinced that any farmer in this district is making a huge mistake in not using a small tractor. A kerosene burning tractor pulling three bottoms is the economic size. In money it costs less than half to do the

work. In point of economy in time and especially fatigue the tractor is so far ahead of horses that comparison is useless. To follow a breaking plow in the heat makes young men old before their time and kills horses.

Our tractor pulls a 24-inch Wisconsin Brush Breaker on the level at the rate of one-half acre every hour of running time with the expense as above. The breaking takes two men. This is a brush country. The tractor will pull the plow through green stumps, willow or poplar up to a diameter of five inches. It can do nothing with old stumps larger than that. The depth is between six and nine inches.

The disc breaking is man killing and horse killing work. In that work the tractor appeals to me most. Just think, we double disc and harrow two and one-half acres every hour that we run. When we come into the house at night after long hours in the field where we have accomplished a lot we are not one-quarter as tired as we used to be with horses. Then there are not ten horses to water, unharness, clean, feed, bed down, and clean up after when we should be in bed.

When one buys a tractor one should remember that not only is one buying a machine, but he is buying repairs. I advise every-



Best ANTI-FRICTION BABBITTS

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With forty years' experience in manufacturing alloys for all classes of machinery, the HOYT METAL CO. has evolved two alloys which are unsurpassed by anything of the kind now in use.

HOYT'S NICKEL GENUINE Babbitt is especially designed for heavy duty gas tractors.

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If your dealer does not carry these metals in stock, send your order direct to us. In order to insure prompt delivery send postal money order.

Nickel Genuine		Frost King	
Less than 25 lbs.\$1.50 per lb.	Less than 30 lbs.40 per lb.
30 lb. box 1.40 per lb.	30 lb. box37 per lb.
56 lb. box 1.25 per lb.	60 lb. box35 per lb.

Delivered to your nearest express or post office station.

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SASKATOON SASK. MOOSE JAW SASK.

INTERNATIONAL 8 H.P. ENGINE
and 10-inch Rapid Easy Grinder, complete with bagger and belt. Guaranteed in first-class running order. \$225 cash. W. G. Leflar, Dropmore, Man.

FOR SALE—One 27 h.p. Sawyer-Massey engine, run about 90 days, in first class condition; one 32-inch Aultman-Taylor separator, almost new. For particulars, write V. C. McCurdy, Moosomin, Sask.

one to buy only a tractor whose manufacturer keeps an absolutely full stock of repairs near and all the time, especially those repairs which are out of the ordinary. One day's breaking means a lot of money, and one does not want to be told that "he had to send to the factory for that repair because he never knew one to break before in his life."

In the harvest we pulled a 6-foot binder, 7-foot disc and 2 sections of harrows at the rate of two-and-half acres per hour of running time. Our fields are badly cut up and horses always slow up at the many corners. The tractor slipped around all corners no matter how sharp, faster and cleaner than any horses. It took two men, but it was away ahead of the horses. The crop of weeds and wild oats which sprang up was a joy to behold.

The tractor handled a 27-42-inch Aultman-Taylor thresher with blower and self-feeder. We carried six teams and a pitcher. There were many settings and changes for grain and the average for 16 days was 1,200 bushels. The tractor was up to full capacity, and could not have done any more.

Tractors sink in wet spots and we carry a stump puller along in each field for just such happenings. The Titan runs with both drive wheels on the sod. I would advise against any tractor which runs with one wheel in the furrow in this district, because every farm has wet spots, and if you get into a wet furrow you sink. And much faster than if you were up on the sod.

The Titan is a good engine, but can be strongly criticised for weakness in the front wheels, axle and frame. It does not stand up in rough work around here as well as it should.

This year I plan to attach the packer to the drill and pull both with the tractor. Will be pleased to let you know how it turns out.

All engines are hard to start in cold weather, but this tractor with a crank on which you can put a lot of heft is not so hard. The tractor is so small that a canvass can be thrown over it, a kerosene heater placed beneath, and in one half-hour the engine is hot enough to start on kerosene, even if it is 30 below zero.

The Titan has 500 R.P.M. From my little experience I have come to the conclusion that any tractor running faster than that will not stand up as long as a slower machine. Speed shakes things to pieces quickly.

The pulley on the Titan can be severely criticised. It is cheap and the lubricating of it is very poor. A great number of owners have had their pulleys burnt out

and had to have them rebushed at large expense.

The small tractor is a most important farm implement, and has come to stay. I feel that it fills a large place in Canada's programme of production. I advise their use with one condition, and that is this: The owner must like machinery and must run the engine himself. It will never do to let an inexperienced careless hired man on the tractor, although most tractors of to-day are nearly fool proof. The tractor is generally all right, and it is always best to leave it alone, especially the magneto.

I hope that this long rigmarole will give you a little of the information for which you seem to ask, and if it proves of any value to a purchaser I will feel satisfied.

Yours truly,
H. Marshall Taylor.

A VERY BIG ORDER FOR A MODERN WATERLOO

IN the course of the War Department's statements to the public there appears the rather casual item that to each American army in the field will be allotted 154,747 officers and men for motor transport work. As it happens this is nearly as many officers and men as engaged on both sides in the memorable battle of Waterloo in which the world-rule dreams of the mighty Napoleon were shattered.

In addition to the 154,747 officers and men, each American army will have 40,803 motor trucks, 24,250 motorcycles, 7,905 passenger cars and 6,593 ambulances in motor transport work. Witness the utility of the motor truck. Witness the utility of the sometimes called "pleasure car." Not to mention the other motor vehicles. History will go down on record with the credit for the saving of Verdun—and Paris—allotted to the motor truck. History also will mention the dispatch bearers and staff drivers who hurried through showers of shells and bullets by motor.

Times have changed since that first Waterloo. But there is another Waterloo coming. And the motor vehicle and the men who attend and drive it are going to be mighty powerful factors in deciding whose Waterloo it shall be. All power to the forces of the Allies for their motor transport corps!

"But couldn't you learn to love me, Stella?" he pleaded.

"I don't think I could, Frank," she replied.

He stood erect, then quickly reached for his hat. "It is as I feared—you are too old to learn."

The Power Behind Your Farm Work

Power is a dominant feature on your farm today. Equip yourself with an efficient power plant and your results are half assured.

A Fairbanks-Morse "Z" Engine

does the work of several men better and more economically.

150,000 farmers are daily demonstrating that the "Z" is the greatest engine value ever produced.

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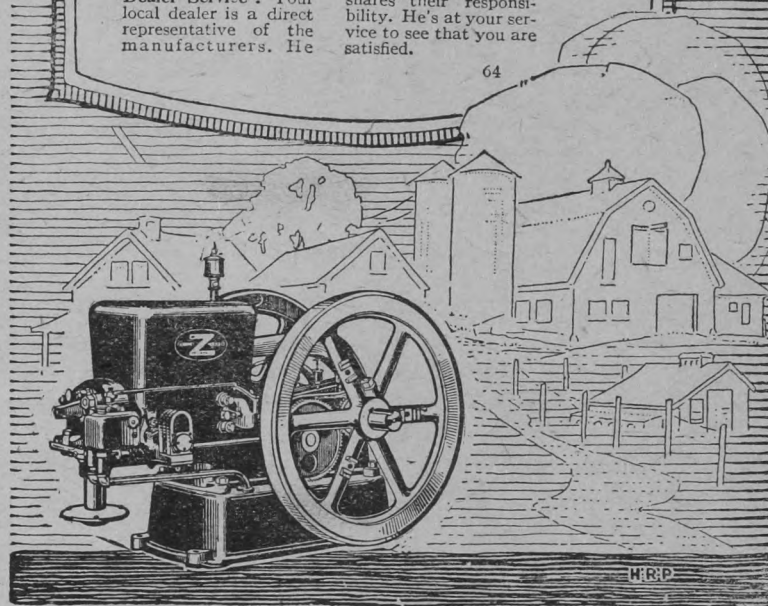
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shares their responsibility. He's at your service to see that you are satisfied.



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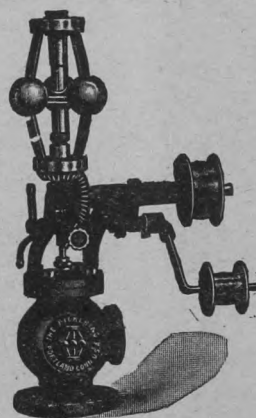
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MANITOBA WELDING & MFG. CO.

56 and 58 Princess Street, WINNIPEG, Manitoba

WANTED, A TRACTOR HOME

Owner Should Furnish Shelter as Business Proposition

WANTED, a home. The care of a tractor means more than mechanical care. But the condition illustrated at bottom of the page is all too common. The tractor on the farm needs a home, and must have it if it is to give service all the time and at the right time.

Throughout the great agricultural regions it is very seldom that one can travel far and not see a tractor standing in the barnyard, in the field or by the road, uncovered and unprotected. Yet, as a tractor expert says elsewhere in this issue, the tractor must be under shelter.

Some of these farms in the agricultural regions of Kansas, Iowa and other states, have two and three-car garages, yet leave their tractors out of doors overnight and on rainy days. The scene at the bottom of page is a reproduction of an actual field in Northern Wisconsin during a recent rainy period. Perhaps that farmer thought the rain would be over in a few hours; perhaps he thought he would be able to start plowing there again next day and the tractor would suffer no harm. But what if a rain kept up ten days or even three days, what kind of treatment would that be for the tractor? Not the right kind of treatment, to say the least. And yet the tractor owner who would do such a stunt would probably send 30 miles for someone to come and start his tractor again if it stopped in the middle of the field of its own accord.

Such a tractor owner possibly will have to do that now. A tractor to a large extent is like a motor car. It is not like a steel portable engine or a steel separa-

tor. It is not the kind of a machine the maker would recommend to be left out in the rain without any protection at all and guarantee its working not to be affected in the least. Rain may be a good thing for some machinery in that it washes the dirt off, but not for a machine such as the tractor is.

The tractor should be under shelter especially during rain. Water may ruin the carburetion, in the first place, or the ignition or some other vital part. Did you ever have a car go back on you after standing out in the rain? Didn't it fail to start? The same thing applies to the tractor. It may have to be dried out and perhaps be idle until an expert can locate the trouble. The tractor should have the same careful shelter that a motor car received. It pays. The farmer cannot afford to be without the use of his tractor. It is a business proposition. He makes his money largely through it. Treat it kindly.

THE HORSE POWER OF A BELT—HOW TO CALCULATE IT

TO-DAY almost every farm has its gas-engine, and every farmer is called upon, at some time or other, to select material for the transmission of power from an engine or a line-shaft to driven machinery. Sometimes an experienced man is consulted, but even he generally guesses at the size of belt needed to transmit a certain amount of power and the result is that in some cases belts thus chosen are too light, while in others they are unnecessarily heavy. There is a simple method of calculating the size of belt needed to transmit a given number of horse-power, which is of great value in solving such problems.

The transmission of power depends on the friction between the

Columbia Dry Batteries

IF the engine won't start or the bell won't ring—if you must have quick power for a truck or tractor—if autos won't go, or lanterns won't light, or telephones are dead on your hand—wire in a set of

COLUMBIA Batteries

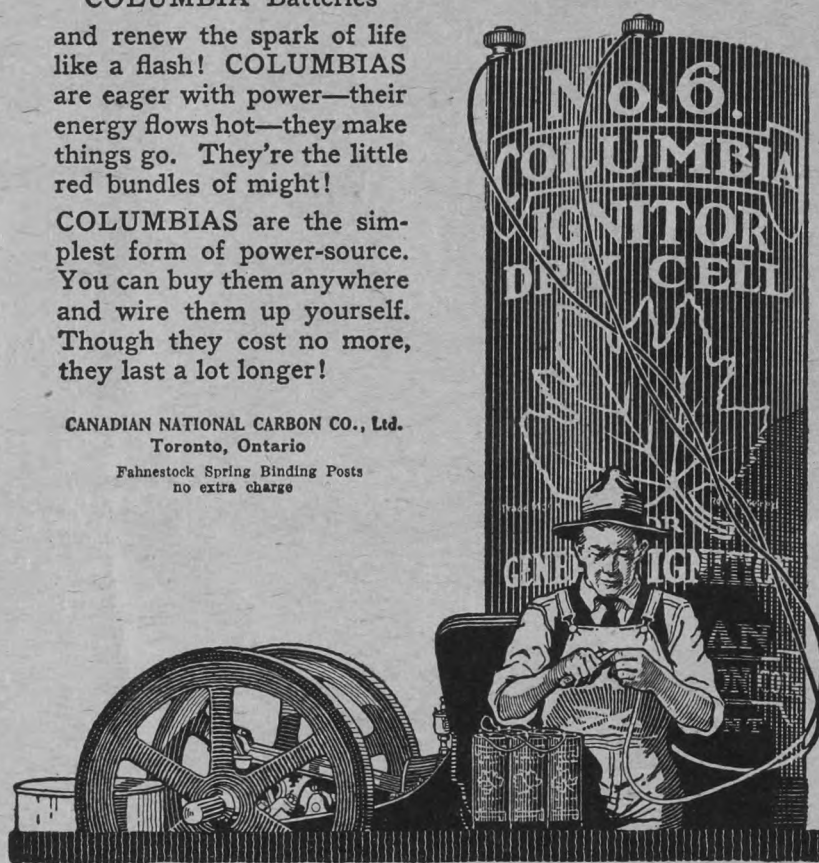
and renew the spark of life like a flash! COLUMBIAS are eager with power—their energy flows hot—they make things go. They're the little red bundles of might!

COLUMBIAS are the simplest form of power-source. You can buy them anywhere and wire them up yourself. Though they cost no more, they last a lot longer!

CANADIAN NATIONAL CARBON CO., Ltd.
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Fahnestock Spring Binding Posts
no extra charge

Buy them Anywhere
Easily and Quickly
Wired up



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We can supply a thoroughly practical outfit from \$100.00 up. There should be at least one plant in every district to repair breakages quickly and SAVE TIME and MONEY. Up-to-date farmers with Traction Engines are putting in welding outfits and doing their own and their neighbors' repairs. We give free instructions to purchasers.

SEND YOUR Broken Castings
Scored Cylinders or any kind of Repairs. We Re-bore Cylinders, True Up Crank Shafts, Re-tip Boiler Flues and are in a position to handle any repair job promptly.

Nothing too large or too small

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IS THE BEST SERVICE ANYONE CAN RENDER TO A FARMER WHO USES ANYTHING IN MECHANICAL POWER EQUIPMENT ON HIS FARM. WE ARE NEARING THE DAWN OF PEACE WHEN EVERY WHEEL THAT CAN BE HARNESSSED TO THE BUSINESS OF PRODUCTION MUST BE MADE TO DO ITS WORK DAY IN AND DAY OUT, STRENUOUSLY AND CONTINUOUSLY FOR A LONG PERIOD, TO MAKE UP FOR THE FRIGHTFUL LEAKAGE IN SUPPLY, CAUSED BY A STATE OF WAR. THE VERY BEST BELT SERVICE THE WORLD KNOWS, OF IS GUARANTEED BY THE



LION BRAND
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ENDLESS THRESHER BELT



They are unbeaten in the field of grain production,

and are sold by all thresher companies doing business in Canada. They may cost a trifle more than some fabrics that are always a big risk but that is forgotten in the added years of service, and we guarantee our goods against all disappointment from slippage or breaking. It is not possible to make better belting by any scientific method known at this day.

Gutta Percha and Rubber Limited

WINNIPEG FORT WILLIAM REGINA SASKATOON CALGARY LETHBRIDGE EDMONTON

belt and the face of the pulley on which it runs, the pulley revolving as the belt is pulled over it. A belt when pulling a load always has a tight and a loose side. The difference in pounds between the pulls of the two sides is known as the effectual tension of the belt. The effectual tension multiplied by the velocity of the belt in feet per minute gives the number of foot pounds of work transmitted per minute.

The Horse-power of a Leather Belt

Experiments have shown that the average effectual tension of a single-ply leather belt to be about 33 pounds for each inch of width and from this standard the following formula has been arrived at:

$$H.P. = \frac{V \times W}{1,000}$$

Where H.P.=Horse-power delivered by belt.

V=Velocity in feet per minute.

And W=Width of belt in inches.

The velocity is found by the following method, dia. of one of the pulleys $\times 3.14 \times$ revs. per minute. Taking as an example a 6-in. belt travelling 3,000 ft. per min., we have the following number of H.P. delivered.

$$\frac{V \times W}{1,000} = H.P.$$

In this case $V=3,000'$

$W=6"$

we have $3,000 \times 6$

$\frac{18,000}{1,000}$

$=18$ H.P. is

the amount the belt will deliver.

Supposing that we have a 20-h.p. engine with a 40" pulley running 200 R.P.M., and we wanted to know how wide a belt was needed to handle it, we would proceed as follows:—

40×3.14

$\frac{2,117 \times 200}{12} = 2,117$ ft. per min. is

12

velocity of belt.

$V \times W$

Using the formula $H.P. = \frac{V \times W}{1,000}$

$\frac{2,117 \times W}{1,000}$

we have $20 = \frac{2,117 \times W}{1,000}$

$1,000$

or $(20 \times 1,000) = (2,117 \times W)$

$20,000$

or $\frac{20,000}{2,117} = W$, which comes to 9.21"

2,117

as the width of belt needed to deliver the amount of power given.

It is necessary when buying belting to know how heavy a belt is required and it does not pay to guess it. It is true that a wide, heavy belt costs more money, but when we remember that one big belt a little heavier than absolutely necessary will outlive two belts which are under strength, we must realize the economy of the heavier belts.—"Canadian Countryman."

1842

P & O

1918

LITTLE GENIUS TRACTOR PLOWS

Power lift on all three wheels. Adapted to any tractor. Perfect bottoms. Pin-break hitch. Quick detachable shares. High level lift—great trash clearance. Single trip rope control. High-grade coulters with adjustable cone bearings. Levers swing back over plow when bottoms are raised. Many other features that make the P. & O. Little Genius the ideal plow for small tractors, and an easy plow to sell.

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For Any Light Tractor**



Made by PARLIN & ORENDORFF CO., Canton, Ill., U.S.A.

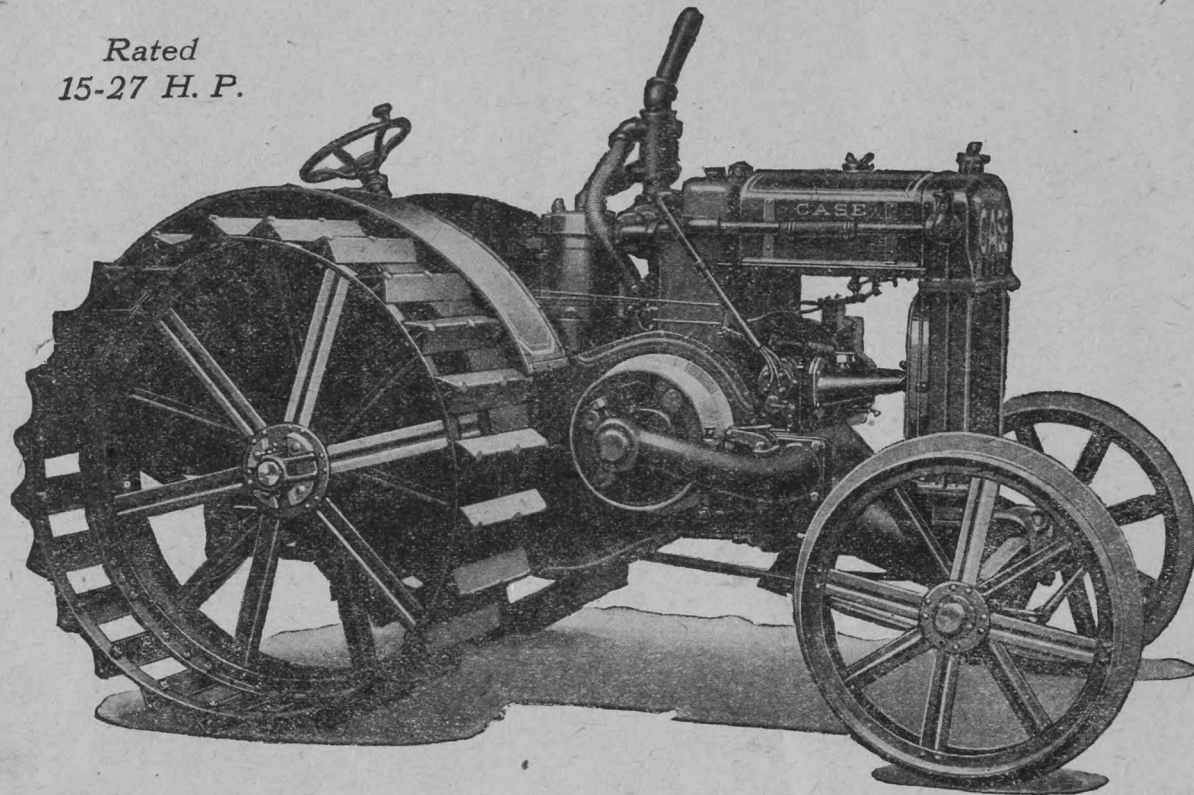
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Rated
15-27 H. P.



Latest Case Kerosene Tractor

WE picture here, for the first time, the recently announced Case 15-27. We present it after months of planning, after years of experience in this field. It is a refinement—a better tractor than we ever built before of this size.

And we are proud of it. We feel that it is going to win thousands of new friends for us.

In every particular, this 15-27 brings the latest and best in tractor designing and building. It has dozens of betterments, and many exclusive features.

It conforms to rigid Case standards. Study the specifications. See how we have combined all the acknowledged superiorities. Note that we avoid the experimental.

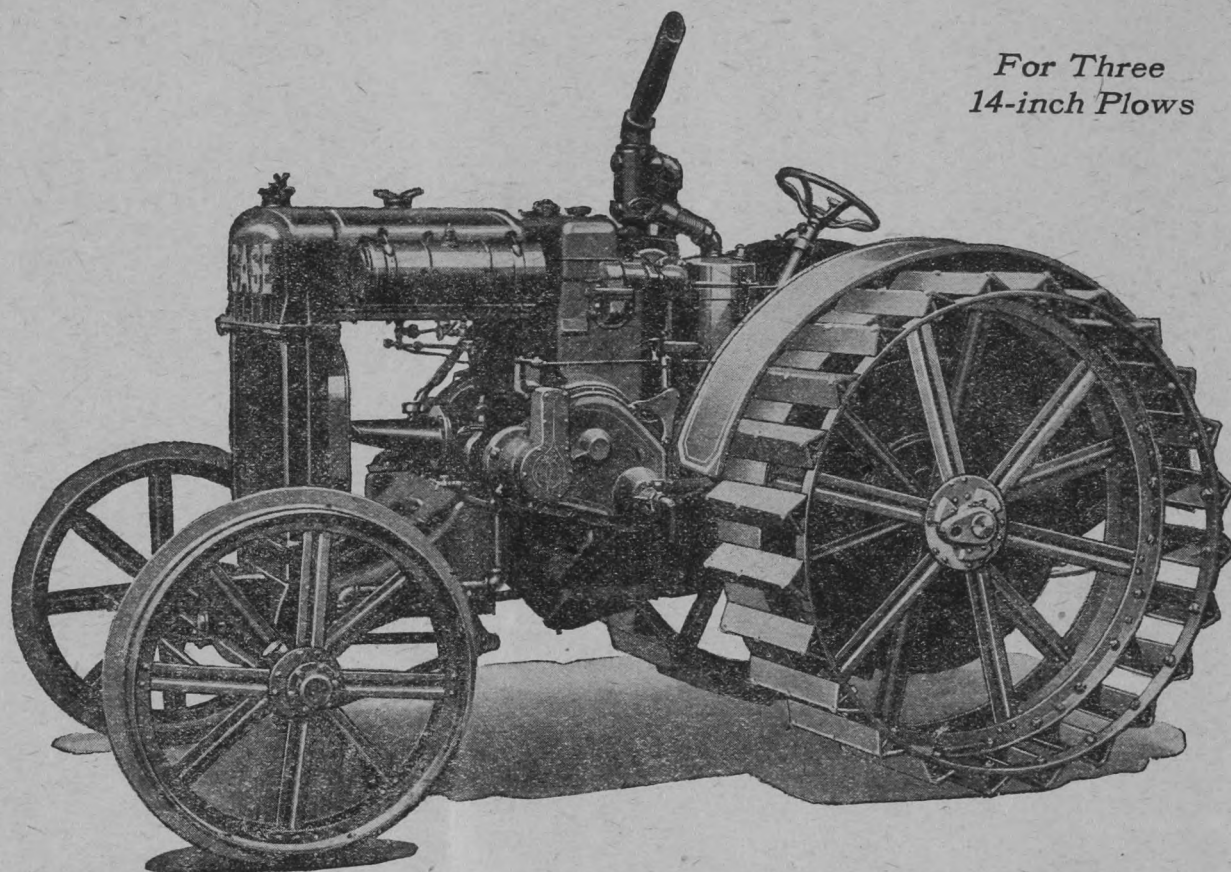
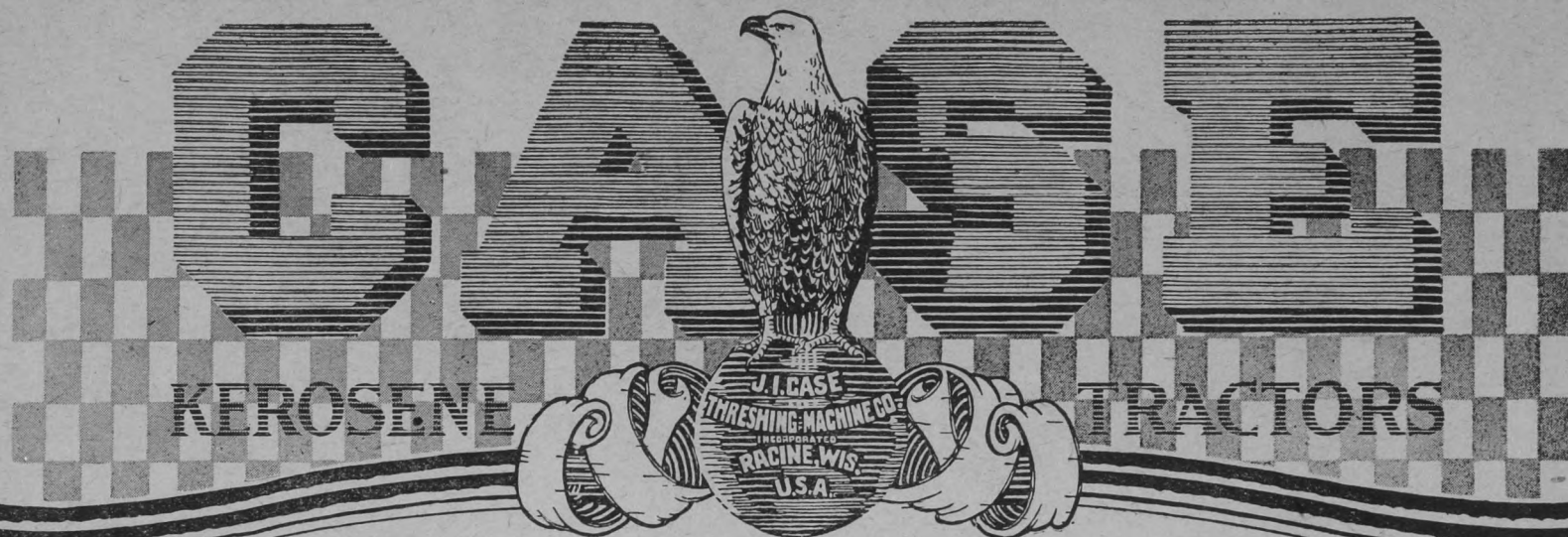
This tractor has created a sensation in engineering circles. And every farmer who sees it at work acknowledges its mastery.

You can't afford to buy a three-plow tractor until you know this Case 15-27. "Better be safe than sorry."

J. I. Case Threshing Machine Company, Inc.

(Founded 1842)

1334 Erie Street, Racine, Wis., U. S. A.



*For Three
14-inch Plows*

Rated 15-27—Develops 22% More

LIKE the others of this Case Line, this tractor is thoroughly dependable. It will do what it is built to do. It draws easily three 14-inch Grand Detour plows. It has the reserve power needed for the heavier pulls, developing one-third more than its rating of 15 horsepower on the draw bar.

It turns in a 27½-ft. circle. Its length over all is only 127 inches. All four wheels run on unplowed ground without undue side draft when plowing.

The four-cylinder motor furnishes ample power and uniform motion for threshing and other belt work. It will drive a 20x30 Case thresher fully equipped.

Complete details of any Case Tractor will be sent you on request.

Brief Specifications

Length over all 127 in., width over all 72 in., height over all 68 in. Shipping weight, 5500 lbs. Drive wheels, diameter 52 in. Front wheels, diameter 32 in. Motor, Case valve-in-head, head removable. Motor set crosswise upon one-piece main frame. Four cylinder. Bore 4½ in., stroke 6 in., 900 R. M. P. Ignition, dust-proof high tension magneto. Carburetion, Kingston single carburetor. Fuel, kerosene, distillate or gasoline. Air cleaner, carburetor draws air through screens and water—no dust can enter cylinders. Cooling, water, circulation by pump, circulation controlled by Syphon Thermostat. Army truck type radiator. Lubrication system, pump and splash. Number of speeds forward, two—first, 2¼ miles per hour; second, 3½ miles per hour. Bearings, Hyatt roller, in drive axle, bull pinion shaft and transmission. All cut steel gears, enclosed and running in oil.

J. I. Case Threshing Machine Company, Inc.

(Founded 1842)

1334 Erie Street, Racine, Wis., U. S. A.



HAS PIGWEED SEED ANY FEEDING VALUE?

(Experimental Farms Note.)

THERE is a considerable difference of opinion among farmers in regard to whether pigweed seeds, i.e., the seeds of the common weed known as pigweed or lambs quarters, have any appreciable value for feeding live stock. On many farms these seeds were used for feed last year and good returns claimed. Elevator companies bought these seeds at from \$10.00 per ton up, and exported them, presumably for feeding purposes. To get some accurate data on the subject, an experiment was undertaken at Brandon Experimental Farm during the winter of 1918.

Three lots of pigs weighing about 150 to 175 pounds each were fed; 1st, on barley and feed flour 3 to 1; 2nd, barley and boiled pigweed seed, 3 to 1; and 3rd, barley, boiled pigweed seeds and feed flour 1½ to 1½ to 1. That is taking barley and feed flour as a standard pig fattening ration. Pigweed was tried as a substitute for all the feed flour and as a substitute for half the barley. A fourth lot of pigs was fed for part of the time on pigweed seeds alone. The barley was charged at \$1.20 per bushel and the feed flour at \$50.00 per ton, the actual cost in each case. No charge was made for the pigweed seed itself, but \$10.00 per

ton was charged for fuel and time used in boiling the feed.

The lot of pigs (No. 1) fed on barley and feed flour gained 1.4 pounds per day at a cost of \$10.40 per 100 pounds of gain. The lot fed on barley and pigweed (No. 2) gained .85 pound per day at a cost of \$14.02 per 100 pounds of gain. The lot fed barley, feed flour and pigweed (No. 3) gained .8 pounds per day at a cost of \$12.50 per 100 pounds of gain. The lot fed pure pigweed did not gain at all, and had to be put on to a different feed after about ten days or they would soon have died.

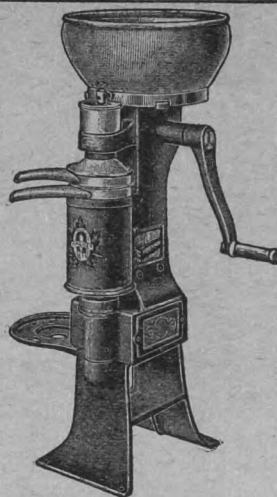
Now, a casual observer seeing Lots 2 and 3 without comparing them with Lot 1, would say they were eating the pigweed and in healthy condition and apparently doing fairly well, and would perhaps jump to the conclusion that the pigweed was proving a satisfactory food. But when these lots are compared with the first lot we find that the pigweed reduced greatly the daily gain as compared to that made on a good ration and that it increased the cost of producing the pork. In other words, there would have been more money made out of the pig feeding operations as a whole if the pigweed seeds had been left to rot in the field.

The lot fed on these seeds alone more clearly demonstrated their worthlessness, as they were unable to get more nourishment than barely enough to keep up their original weight. The con-



Warrior from Palestine (whose baby is about to be christened, and who, has a bottle of Jordan water for the purpose): "Eh, by the way, Meenister, I ha'e brocht this bottle—"

Minister: "No' jist yet laddie! After the ceremony I'll be verra pleased!"



After nearly 18 years' constant use on Canadian farms the "Magnet" has established beyond the shadow of a doubt that its square gear drive and ball-bearing adjustments is unequalled as an effective piece of dairy mechanics and has nothing in front of it in lasting quality.

VICTORY!

Unquestioned, complete and final is in the grasp of the Allied armies as we write these words. This means that the world will soon be FREE and unmolested by so much as a pop-gun to pursue its blessed pathway of peaceful labor. It also means that at once there must arise an abnormal demand for the food supply that has been so long cut down to starvation rations. Are you, Mr. Farmer, awake to your part in this? Do you know what the one item of butter and cheese will mean? If you have the cows, a

"MAGNET" Cream Separator—

will secure the last atom of butter-fat in the milk of your herd.

The greatest labor-saving and food-conserving machine ever introduced into Dairy Farming.

DAIRY WOMEN know that the "MAGNET" bowl and one-piece skimmer is easily washed sweet and clean in less than five minutes—a saving of from 10 to 15 days' labor each year over the time required to properly wash the disc kind.

MAGNET ALWAYS SKIMS CLEAN

because its bowl is supported at both ends, cannot wobble and therefore will do perfect skimming for a life-time. Dairy men and women can avoid all "misery" by buying the up-to-date "Magnet" Cream Separator.

"Facts are chiefs that winna ding, and canna be disputed."

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clusion is therefore reached that pigweed seeds are not worth feeding to pigs. Where apparently satisfactory results are obtained, the pigs must be making their gains entirely on other feeds, such as grains of wheat, in the pigweed, or other feeds which are given in addition to the weed seeds.

POTATO SEED SELECTION

(Experimental Farms Note.)

LIKE begets like in the potato field as elsewhere, but judging by the quantities of inferior tubers used for seed purposes the importance of this law is not appreciated by many. The use of small potatoes taken from the bulk of the crop, year after year, and used for seed will eventually lead to yields of inferior potatoes.

At potato digging time the great opportunity for seed selection is offered. With the product of each plant spread on the soil it is an easy matter to select out those plants that have given the largest yield of the most desirable type of potato and are free from disease. The potatoes from such plants only should be gathered and saved for use as seed the following year. This saving of seed at digging time may seem to many as an extra burden during a rush of work, but it is not.

There is less actual labor attached to seed selection at the time of the potato harvest than there is by practising any other method of seed selection. Furthermore, the results from hill selection are reasonably certain, while with other methods there is some speculation. Potato growers would do well to watch closely for exceptionally good plants. These, harvested and saved apart from the main crop, may become the grand-dads of fine potato fields in the future.

HARVESTING NUTS AS A PATRIOTIC PASTIME

(Experimental Farms Note.)

THROUGHOUT Canada there is a generous supply of nut-bearing trees which yield an abundance of edible nuts rich in food value, as the butternut, black walnut, the hickories, hazelnuts and beech nuts. Nuts are more nutritious than milk, eggs, bread and meat, one ounce of nut kernels being equal in food value to a pint of milk. Nuts are ready to eat without the labor and cost of cooking. They may be served in the form of delicious sandwiches, in salads, in fruit jellies and cakes, or a handful may be kneaded into a loaf of bread before it goes into the oven. A few

kernels put through the nut chopper and scattered over the breakfast cereal adequately supply the place of bacon.

This important food crop is waiting in the woods to be gathered in. A few afternoons spent nutting in the woods during the bright autumn days will supply the home with nuts for the winter and will save the meat supply for our country's defense. After gathering, the nuts should be spread on the attic floor or on shelves in a dry place to allow the surface moisture to escape. They may be cracked at leisure by the boys and girls in dull weather and stored in airtight glass jars.

A few of the finest nuts should be saved for planting nearer home. Nothing will give the children greater pleasure than to choose and plant their own nut trees. If space allows, a future nut-orchard might be planned or young trees transplanted as shade trees. The beech is a very beautiful tree, both in winter and summer, and the butternut, walnut and hickory make good garden shade trees and their wood is very valuable.

The butternut occurs from New Brunswick to Ontario, while the black walnut is found in the southern part of Ontario. The shagbark hickory ranges from Quebec to the north shore of Lake Huron, the mockernut hickory occurring in Ontario only. The hazel nut extends from the Maritime Provinces to Saskatchewan; the beaked hazel nut has an even greater range, extending into British Columbia. The beech ranges from Nova Scotia to Ontario.

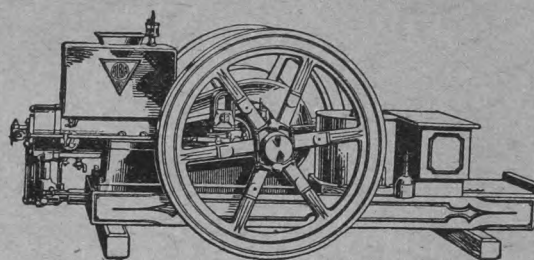
PACKING OR HARROWING OF FALL PLOUGHING

(Experimental Farms Note.)

THE importance of conserving moisture has received particular emphasis because of the vagaries of last season, when no moisture fell during the early part of the year when crops were making their heaviest demands on the moisture supply, but when liberal amounts of rain came during August. This late supply of moisture, if properly safeguarded, should be available for next year's growing period, and constitute a considerable assurance of prompt germination and satisfactory early growth in the spring.

In order that crops may make a satisfactory beginning, timeliness in seeding is important, and the possibility of getting seed in promptly depends much on the amount of fall work done and the manner in which this work is performed. It is important that as much fall ploughing as possible be done; that this ploughing be done to a depth of six inches, and

"Machines must take the place of men"



Grind Feed
Saw Wood
Pump Water
Run Separator,
Churn or Wash-
ing Machine

Let the "Alpha" Gas Engine do your work

AN ALPHA Engine is a big help on the farm these days when labor is so hard to get. It's so reliable, too. Always on the job. Never quits. Never gets laid up. Never takes a vacation. You can always depend on an "Alpha."

Thousands of Canadian engine-owners swear by the ALPHA because they have found that it can be depended on at all times and under all conditions. It is sturdily built. It is simple in construction. It is powerful. It runs on either gasoline or kerosene and develops its full published horse power on a minimum amount of either. If you want an engine that you will be thoroughly satisfied with, put your money into an ALPHA.

Ask for catalogue, prices and complete information. Made in twelve sizes, 1½ to 28 H. P. Each furnished in stationary, semi-portable or portable style, and with hopper or tank-cooled cylinder.

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Book.

We have a copy for you.

The Book is given without charge. It is self-explanatory and there is a place in it for everything you plant, raise, buy, sell, have on hand; with a summary of the year's business.

It contains instructions for correctly preparing the Income Tax Returns (thus preventing any chance of your being over-taxed) besides many other valuable features.

It enables you to put your farming on a business basis and shows you just where you stand at the end of the year.

Write or call for a copy at any Branch of the Bank or a post card request addressed to the

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MERCHANTS BANK OF CANADA, Winnipeg or Montreal,
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48W

that as the ploughing proceeds the day's work of the plough be gone over with the packer or drag harrow.

If the ploughing is left untouched, there is too free a circulation of air through the relatively large interspaces between the soil particles, with the resultant withdrawal of moisture from the soil to the atmosphere, where it is of no value for next year's crop. It is particularly important that the work with the packer and harrow be done promptly, for if deferred for a few days, "until a more convenient time," it is possible that a windy day will withdraw more moisture than could be added by a good shower.

Such withdrawal of moisture might mean that there would be an insufficient supply to insure a prompt germination of the seed next year, and such delay might mean a loss of the crop. It is important, therefore, that this work be done as the plowing proceeds, and that at least two strokes of the drag harrow be given, or that the land be gone over once with the surface or combination packer.

THE QUALITY OF PLOWING AND POWER REQUIRED TO PULL PLOWS

By Raymond Olney

IT was one of the leading agricultural experts in this country who once said that plowing is the most important, as well as the least understood and most imperfectly performed operation connected with the growing of a crop. The man on the farm knows a good job of plowing when he sees it, but to be able to do good plowing is quite another thing. And furthermore it is not as generally understood as it should be, that the quality of plowing depends more on the plow than anything else—even than on the condition of the soil. This in turn means that the plow, more particularly the moldboard, should be designed to do the best plowing in the kind of soil in which it is intended to work, and the various parts should be in good condition and properly adjusted to the work in hand.

Before going into a discussion of that relation of the plow to the quality of plowing, the scientific reason for plowing should be thoroughly understood. Does the reader know just why he plows? This may not seem a logical question to ask, but a plowing expert recently asked this of an audience of 250 farmers, and he did not get an intelligent answer. Failing to receive voluntary answers, he called on individuals in the audience. With one exception each

reply was, "I don't know." The exception was the man who said he guessed he plowed because his father did.

In view of the apparent lack, on the part of many at least, of a clear understanding of the "why" of plowing, it is not necessary, for better success in farming, that more attention, that a more comprehensive study be given this "most important of all operations connected with the growing of a crop?"

We plow for two fundamental reasons: (1) to loosen and pulverize the soil (change its texture), and (2) to turn it over in such a way that any vegetation, manure, etc., on the surface will be completely buried on the bottom of the furrow. The action of the moldboard of the plow on the soil is the same as when you place the fingers upon the flyleaf in the front of a book and the thumb under the flyleaf in the back, and then bend up one corner. Each leaf will slip over the next one to it. In other words, the tendency is to divide the soil into thin layers; and it is this "shearing action" that causes the soil to become pulverized. If properly designed for the work, the moldboard of a plow pulverizes the soil as no other implement can. The thoroughness of this pulverization process will depend very largely on the shape of the moldboard.

And let it be thoroughly understood at this point, that plowing requires an enormous expenditure of energy, much more so than any other farm operation, no matter whether the quality of our plowing is good or bad. And also let it be understood that the more thoroughly the soil is pulverized, that is, the more work that is done upon it, the greater the amount of energy that is necessary to do the work. Or, in other words, the draft of the plow will be greater the more thoroughly it pulverizes the soil.

Every man who operates a plow is anxious to keep the draft as low as possible, and this he should do by seeing that it is kept in proper working condition and correctly adjusted.

But it is decidedly unwise to sacrifice quality of plowing for the sake of reducing the draft of the plow by using a less efficient moldboard. That for which every farmer should aim, first of all, is to do the very best job of plowing he can, for the best is none too good. But as has just been demonstrated, it takes more power to do good plowing than poor plowing. What if it does take 10 to 25 per cent more power? The increase in crop yields resulting from a properly turned, properly pulverized furrow slice will offset the additional power required many times.



There's Cheer in the Pictures from Home

To a homesick boy at the front, a picture of Dad waiting at the end of the lane while "Shep" brings up the cows is worth more than the Croix de Guerre.

Pictures of mother, how much they mean to him now! And of kid sister—perhaps she is "wearing her hair up" by this time—all the old familiar scenes around the farm, yes, and that little girl with the big blue eyes that lives down in the village—these will mean a world of comfort to the boy who is lonesome among a million strangers.

The Y. M. C. A., the Red Cross, and kindred organizations are doing a world of good in ministering to the bodies and minds of our boys. But in their hearts, homes are first. Cheerful letters and cheerful pictures from home—these will keep their hearts light and their courage high.

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**Got Gophers?
Kill-Em-Quick**

Don't Feed Gophers All Fall. Kill 'Em Now. Use **KILL-EM-QUICK**

A REALLY GOOD FARMERS' ACCOUNT BOOK

One of the most satisfactory accounting systems for farmers we have yet seen is the new Farmers' Account Book issued by the Merchants Bank of Canada.

Some "accountants" seem to take a great deal of satisfaction in enveloping their systems of book-keeping with an atmosphere of mystery. They make "confusion worse confounded" in the mind of the ordinary person.

Here is something that any man with an ounce of brains can follow, and it will prove a mighty lever in the conduct of his business if he will only get one, and get into the habit of making the simple little records of debit and credit that it calls for.

Copy of it may be obtained on request in any branch of the Merchants Bank of Canada, and we strongly urge our readers to take full advantage of the invitation herewith.

WHO IS TO BLAME FOR THE I.W.W.?

By Robert W. Bruere in "Harper's."

THE division superintendent of a great western railway recently explained to me his reluctant part in the creation of the socially disintegrating conditions out of which the migratory workers and the rebellious propaganda of the I.W.W. have sprung.

"The men down East," he said, the men who have invested their money in our road, measure our administrative efficiency by money return—by net earning and dividends. Many of our shareholders have never seen the country our road was built to serve; they get their impression of it and of its people, not from living contact with men, but from the impersonal ticker. They judge by quotations, and the balance-sheet.

"The upshot is that we have to keep expenses cut close as a jailbird's hair. Take such a detail as the maintenance of ways, for example—the upkeep of tracks and roadbeds. This work should be going on during the greater part of the year. But to keep costs down, we have crowded it into four months.

"It is impossible to get the number and quality of men we need by the offer of a four months' job. So we publish advertisements broadcast that read something like this:

"Men Wanted! High Wages! Permanent Employment! We know when we put our money into these advertisements that they are—well, part of a pernicious system of sabotage. We

know that we are not going to give permanent employment. But we lure men with false promises and they come.

"At the end of four months we lay them off, strangers in a strange country, many of them, thousands of miles from their old homes. We wash our hands of them. They come with golden dreams, expecting in many cases to build homes, rear families, become substantial American citizens. After a few weeks, their savings gone, the single men grow restless and start moving; a few weeks more and the married men bid their families good-bye. They take to the road hunting for jobs, planning to send for their families when they find steady

work. Some of them swing on to the freight trains and beat their way to the nearest town, are broke when they get there, find the labor market over supplied, and, as likely as not, are thrown into gaol as vagrants. Some of them hit the trail for the woods, the ranches, and the mines. Many of them never find a stable anchorage again; they become hobos, vagabonds, wayfarers, migratory and intermittent workers, outcasts from society and the industrial machine, ripe for the denationalized fellowship of the I.W.W.

Buy Victory Bonds

After Lying Four Years in Field Watch Goes as Good as Ever



This is a reproduction from a photograph of Mr. Murphy's watch exactly as it looked when found.

Can you imagine any more convincing proof as to the quality of both the watch movement and the watch case than that they should remain uninjured after lying exposed in a field for more than four years? And it is important to note that during this long period the field had been regularly cultivated, and was, to use Mr. Murphy's own words, "often a lake of mud and water."

The movement in Mr. Murphy's watch—to which he, naturally, is very much attached—is the celebrated "Vanguard" so highly prized by railwaymen. This, indeed, is the watch relied upon by the great majority of railwaymen throughout Canada, because in all departments of railway service, absolute time-accuracy is essential.

The watch case, which played so important a part in the preservation of the movement, was a 30 year gold-filled case (No. 407109), made by the AMERICAN WATCH CASE COMPANY OF TORONTO.

This incident clearly proves that when you have a Waltham movement in a WINGED WHEEL CASE, you have a watch that will give you the very best service under all conditions.

The favorite Waltham watch for gentlemen is the "Colonial," a thin model of most distinguished appearance.

For ladies, the most popular Waltham is the Ladies' Bracelet Watch. This is the watch that can be worn on the chain or brooch equally as well as in the bracelet, because of the "disappearing eye" which folds back snugly against the case when it is desired to wear the watch otherwise than upon the wrist.

Waltham Watches and Winged Wheel Watch Cases can be procured from good jewelers everywhere in Canada. Ask your jeweler to show you his range.

WALTHAM WATCH COMPANY LIMITED
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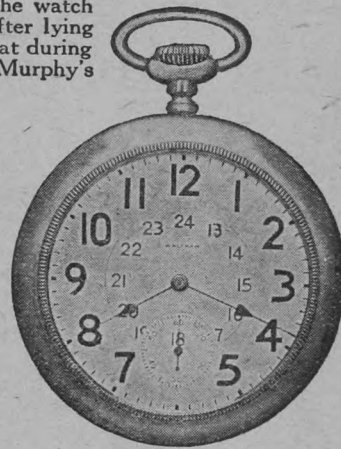
Remarkable Adventure of Farmer's "Waltham" Watch

IT is commonly thought by middle-aged and elderly men that things are not so well made nowadays as when they were boys, but the adventure of Mr. Murphy's Waltham Watch demonstrates conclusively that the Waltham Watch is as sturdily made as anything could possibly be.

Mr. Murphy, during the spring of 1914—before the great war commenced, just think of it!—was running a disc plow over one of the fields of his farm near Neville, Sask. While thus engaged his Waltham "Vanguard" watch in some way dropped from his pocket. As soon as he discovered his loss, he commenced to search for it, but in vain. At last he gave up the fruitless search and in the course of time became reconciled to his loss.

What was his astonishment and pleasure, however, whilst poisoning gophers on the same field recently, to find the watch lying on the surface of the ground.

Eagerly picking it up, he began to wind it, in an abstracted sort of way, and to his surprise the watch began to tick away with all its former energy.



This illustrates the newest style Waltham "Vanguard" Model.

NEVERSLIP
Red Tip Calks
Insure
STRONG EVEN PULLING
ON ICY ROADS

No farmer can afford to risk losing a valuable horse through falls on icy roads when safety is so cheap and convenient. RED TIP CALKS insure safety to the horse and comfort to the driver.

Your blacksmith has them.

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MAKING THE MOST OF MANURES

It Pays to Reduce Loss of Plant Food and Labor in Handling

By C. A. Le Clair

MORE and more farmers are coming to realize that returns from manure can be profitably increased by reducing the labor of handling the material, by minimizing loss of its strength while in storage, and by more effectively applying it to the land.

If it were possible to spread manure as fast as it is produced, not only would all the voided essential plant-food elements in the crops fed to animals be returned to the soil, but the material could be handled with a minimum of expense. Unfortunately, few farmers are either equipped or have the time to care for manure in this way. Even when the dung can be hauled daily from the barns there is not always an opportunity to apply it most advantageously. Hence, the storage of manure, particularly during the summer months, is absolutely necessary on most farms.

The cost of handling manure amounts to a great deal more than most people assume. If, as is most often the case, the barns are cleaned by the wheelbarrow method, at least ten per cent of the time of one or more men is thus employed. In the winter, when it is necessary to clear a path through drifts of snow between the barn and the manure heap, or in the spring, when the yards are muddy and planks must be laid so that the wheelbarrow will not sink to the hub, the time of one man for a half a day is likely to be occupied.

Probably there is no easier and more economical way for dairy and stock farmers to reduce the chore work and consequently the cost of handling manure than by the use of a litter carrier. The

drudgery of barn cleaning is greatly diminished when a self-dumping carrier is a part of the farm equipment. Hired hands find their work more agreeable if they are not obliged every morning to push wheelbarrows full of dung up a stiff grade. With the aid of a litter carrier an industrious boy, old enough to lift a forkful of dung, can do the chore work and allow the hands to go to the fields more promptly.

A litter carrier is one of the types of barn equipment which all farmers can afford to install. On farms of one hundred or more acres, where twenty to forty animals are housed, it averages round forty cents a day to move manure from stalls to storage. Those who have compared the work of barn cleaning with and without a litter carrier, know that the use of such a machine practically halves the work. This means that in a year's time the saving of labor compensates for the cost of the equipment.

Advantages of Machine Spreading

Another way in which the net return from manure can be increased is through the use of a spreader. The spreader distributes the material far more evenly than can anyone by hand. Coarse manure can thus be plowed under with greater ease and its productive value much increased. Furthermore, the use of a manure spreader economizes man and horse labor.

Any farmer who handles as much as fifty tons of manure a year cannot afford to be without a spreader. The increased value of manure makes the purchase of a spreader more of an economy today than was the case when one could be bought for considerably less money. There is no better way in which money can be invested for the purpose of increasing farm profits.

Many makes of spreaders are offered on the market. For great-



THE RETORT COURTEOUS

Pte. Smifkins (to Sergeant, who has found a pair of boots in "No Man's Land"): "What are you going to do with those, Sergeant? Wear 'em?"
Sergeant (fed up): "No, you blinkin' fool; I'm going to hang 'em on my watch-chain!"

Dual Grain Cleaner and Separator



Does the work of two ordinary separators—in half the time the grain can be cleaned by one—and you are sure of better results.

A new principle is used—two separate gangs instead of one—force-feed with repeat elevator. The "DUAL" has double screening surface so that a thinner bed of grain can be made to pass over the screen, producing extra good work. It is absolutely impossible to sag these sieves. The good construction also gives long life.

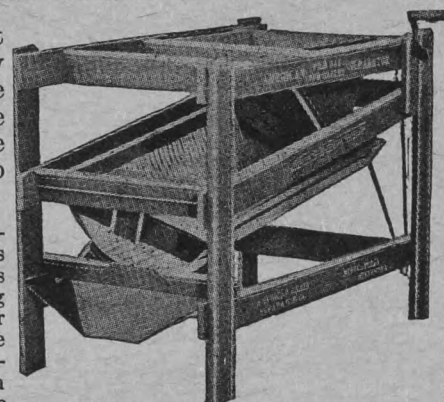
Patented cut-off feature increases capacity 60 per cent over other machines not having any such arrangement.

We have a very interesting folder which illustrates and describes the "DUAL". Send for it to-night. From now until next seeding time you will find a really good cleaner and separator such as the "DUAL" a great help in cleaning grain for either market or seed.

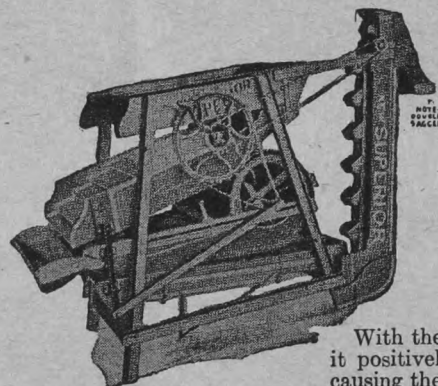
American Wild Oat and Barley Separator and Grader

The only real Wild Oat Separator that absolutely takes wild oats out of tame oats and barley. In the same operation this machine grades the oats or barley to a uniform size for seed.

A long slotted zinc sieve, perforated, absolutely uniform, is used. With our patented slats working over this sieve, keeping it clean at all times, a thin layer of grain is distributed over the full surface of the sieve, compelling every kernel to come in contact with the sieve so that no kernel is allowed to go over that is smaller than the perforation. We have a folder fully describing what this separator does. Ask for it.



The New Superior Grain Grader and Separator



This machine is built to clean any kind of grain and do perfect work. What the "New Superior" cannot do, no other fanning mill can do. Exceptionally easy to operate and ABSOLUTELY RELIABLE.

Made in sizes: 24, 32 and 42 inches wide, with or without bagger, and with power attachment for gasoline engine if desired.

With the patented open and blank sieves it positively separates every wild oat seed, causing them to lie flat and not up on end.

The Lincoln New Superior is strong, well-built and bolted—not nailed.

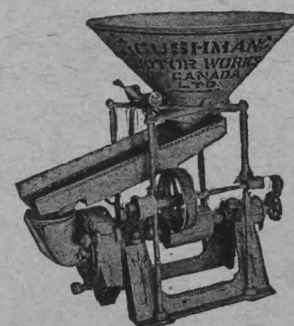
These three mills make it possible to do any grading or cleaning of grain that is possible to attain in grain cleaning machinery.

Tank Heaters; Straw Spreaders; Threshers; 24 x 46 Separators; Combination Threshers; Light Weight Engines; "Hoiland" Wild Oat Separators; Lincoln Grinders; Smut and Pickling Machines; Vacuum Washing Machines; Lincoln Saws; Incubators; Wagner Hardware Specialties; Shinn Flat Lightning Conductors; Land Roller and Packer, Etc.

The New Cushman Grinder

This Grinder will do more work of better quality with the least power of any grinder sold in Western Canada. It is made in four sizes as follows:

6 inch (Flat Plates)	2½ to 4 H.P.
8 " " "	5 " 10 "
10 " " "	6 " 12 "
13 " " "	16 " 25 "



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Dept. A, Whyte Avenue and Vine Street

WINNIPEG, Canada

est efficiency, choose a machine which combines the qualities of durability, light draft and ease of operation. I prefer a spreader of the water-tight bottom type, capable of handling a mixture of solid and liquid manure as taken from the stall or pit.

Fully to appreciate how good equipment reduces the cost of handling a ton of manure consider the following facts. Farm labor is worth about thirty and horse labor about twenty cents an hour in these estimates:

Cost of Handling a Ton of Manure Without Modern Equipment

Kind of Work	Hours Required		Cost
	By Man	By Horse	
Cleaning barn and wheeling to pile...	1	...	\$0.30
Loading from pile to wagon	½	1½	.45
Hauling to field	½	1½	.45
Unloading from wagon to piles	½	1½	.45
Spreading piles in the field	¼08

Total cost\$1.73

Cost of Handling a Ton of Manure With the Aid of Conveyor and Spreader

Kind of Work	Hours Required		Cost
	By Man	By Horse	
Cleaning barn with aid of conveyor	½	...	\$0.15
Loading from pile to spreader	½	1½	.45
Hauling to field and distributing	½	1½	.45

Total cost\$1.05

In making this calculation it is assumed that at least three horses are hitched to the wagon or spreader and that they are idle while the loading is done.

Farming is becoming a business in which financial leaks are being stopped. Successful farmers are learning to appreciate the importance of greater production to the man. Years ago when land was turned with a crook stick and grain cut by hand, it required seven hours of human labor to produce a bushel of wheat. To-day, with the aid of modern machinery, the gang plow and combined harvester and thresher, the same result is obtained with an expenditure of less than ten minutes of human energy. Hence more and more farmers are learning the advantage of even borrowing a dollar to invest in equipment if by its use two dollars can be made. Consequently the litter carrier and manure spreader are now as essential to a dairyman's equipment as the self-binder is to a grain farmer.

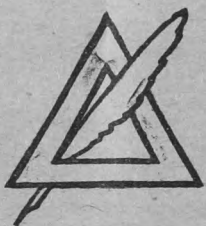
As yet only about one per cent of the farms of Western Canada where stock is kept are equipped with a pit and liquid cistern to prevent the loss of the most valuable part of the manure.

When well-compacted manure is stored in a tight clay bottom or concrete-floored manure pit there is very little loss of the essential plant-food elements. This is especially true if the pile is built with square sides and the top sloped toward the centre. Aside from the advantage of conserving the fertilizer ingredients by stor-



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LIGHT IN COLOR-TOUGH & JUICY
ALWAYS KEEPS FRESH & SOFT

age of manure in this way, the practice is desirable because it adds to the appearance and sanitary condition of the barnyard.

Special Forms of Pits

Time was when the consumers of milk did not concern themselves if the dairyman had his milkhouse adjoining a manure heap. Now, however, sanitary boards of cities are deeply interested in such matters and dairy-men are rated accordingly. Dairies are periodically inspected in many localities, so that the milk output is classified in accordance with the appearance of the barnyard and the neatness of the farmstead. Flies are no longer tolerated about a certified dairy.

Although there is a difference of opinion as to how far from the barn manure should be stored, most men are agreed that the pit should be located not nearer than seventy-five to one hundred feet from the cow barn, and still farther from the milkhouse, if possible. Even when there is no down-grade slope from the barn to the pit, little added effort is required to remove the manure a few extra feet after it is loaded into the cart or conveyor.

The problem of reducing plant-food losses from hog manure combines many difficulties. Hog manure is a wet dung and the hog, unlike other farm animals, voids appreciable quantities of phosphoric acid in the urine which, unless special precautions are taken, is lost. For these reasons few farmers who keep swine can afford to be without a brick, stone or cement feeding floor. A space twenty by twenty-five feet, of a non-leakable character, will accommodate thirty to fifty hogs. Such a floor should be built on a well-drained spot with a curb or apron on all sides extending a foot below and one-fourth foot above the surface.

A pavement having a slope of one-fourth inch to the foot toward the gutter provides for ready drainage of the urine to the cistern. The cobs and dung left on the floor can be thrown over the pavement wall at frequent intervals so as to keep the feeding space clean. When a sufficient amount of waste has accumulated beside the pavement, this rich fertilizing material may be scooped up and hauled to the fields. The soil of hog runs itself also makes a good fertilizer. Many farmers periodically remove this and replace it with subsoil so as to maintain the level of the yard.

From the standpoint of making maximum gains and saving fertility, the use of a solid feeding floor upon which to feed steers is profitable. This has been demonstrated most clearly at one of the leading agricultural experiment stations of the Middle West. After

two lots of sixty steers each were fed for six months, the manure value of the animals kept on a cement floor was compared with that of the animals kept on a dirt floor. Results showed that the increase in crop yield obtained from the manure of the animals fed on the solid floor was sufficient to pay for the improvement in two six-month feeding periods. The increase in value of the manure from the animals fed on the cement pavement was at the rate of \$4.48 for each one hundred pounds of live weight annually.

Now that fertilizer ingredients are so valuable farmers can also well afford to give more attention to their poultry manure. As it is the richest of all animal manures an appreciable quantity of plant food accumulates in the henhouse during the year.

On account of its high content of nitrogen in soluble form, poultry manure should be used with caution. If applied alone in excessive amounts it is much like a Missouri mule—one does not always know just which way it will kick. Poultry manure can be used to advantage on potato, corn,

grass and clover land, but it is too rich for oats.

As removed from the dropping boards, hen manure is generally in large lumps which should be broken up before the material is applied to the land. It is also best to balance the manure by the addition of mineral fertilizers. A fertilizer having a high phosphorous content mixed with the dung at the rate of two pounds of the former to one hundred pounds of latter makes excellent dressing.

There is a wide difference in the composition of the manure of different animals as shown by the following analysis:

Composition of Animal Manure

Kind of Animal	Water	Nitrogen	Phosphorous	Potash
Horse ...	60	.47	.17	.78
Cow ...	85	.53	.07	.29
Sheep ...	59	.77	.17	.49
Hog ...	74	.84	.17	.26
Hen ...	65	1.24	.40	.73

These figures reveal that horse manure is richer in fertilizing elements than cow manure. Owing to the greater fermentation taking place in storage and the larger amount of bedding which the former usually contains it has less nitrogen, but it contains more phosphorous and potash than cow manure.

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A pocket size handbook that is used by trappers all over Canada. It is well illustrated and contains 96 pages, English or French, tells about the habits of Canadian fur bearing animals—how and where to catch them, best style of traps to use for the different animals, kind of bait, and a lot of other useful information. The regular selling price of this book is 50c. but if you are interested in trapping, we will gladly send you a copy **FREE FOR THE ASKING.**

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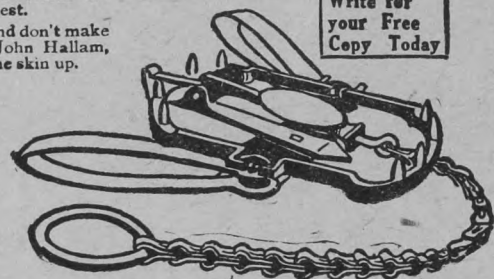
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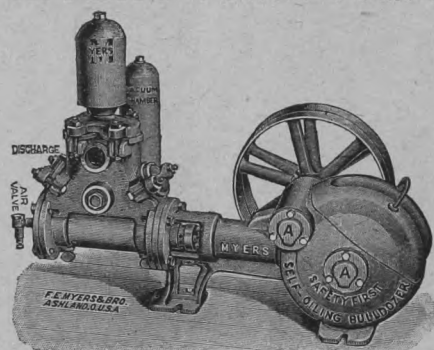
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THE AUTO ON THE FARM

WHEN the city man hears of the farmer with an automobile he pictures the purse-proud tiller of the land, having disposed of his bumper wheat-crop at famine prices, as rolling along the well-kept country road in his touring-car, accompanied by his wife and daughters in their best clothes. It is true that large numbers of farmers now own motor-cars. They and their families take joy-rides occasionally, too; there is no doubt about that; but the cars were not bought primarily for that purpose. The farmer needs the car in his business. Just how, a correspondent of "The Rural New Yorker" (New York) tells us in a sort of symposium of interviews, under the general heading, "How Farmers Use Their Cars." We read in this:

"I did not buy a machine because autos are the style, but I bought it to use," a farmer remarked as he pointed to his load piled in the rear-seat space of his touring-car. The machine is one of the well-known low-priced cars, and this farmer had nearly a half-dozen sacks of fertilizer in his machine. 'I have carried such loads, I drive carefully, have some hilly road, but I find I can make two or three trips and do it more quickly and cheaply than with a team,' the farmer said. 'In fact, there is one disadvantage in using the auto for a truck: the farmer makes such speed with his load that his horses can't travel fast enough to satisfy him. He keeps urging them on, and he can't realize there is a limit to the ground they can cover.'

"I used my auto to unload hay," another farmer said. 'I hitched the hay-rope to the rear axle of the machine, and by driving the machine carefully I was able to do the work as efficiently as with a team.'

"I use a trailer," a Pennsyl-

vania fruit-man remarked. 'My machine delivers the goods. I had an old phaeton, which I made over into a trailer. I cut off the tongue to about three or four feet in length, had a blacksmith iron the tongue, and by placing a bolt through the iron and through a board at the back of the machine a little above the axle, I am able to attach or detach my trailer as I wish. I have carted sixteen bushels of berries in my trailer and hauled seven Italians in the machine. I have used my machine for three years, putting it to hard work, and it has paid. I am a lover of a horse, and am satisfied no machine will take the place of a horse, but, wisely handled, the automobile has become a necessity, in my fruit-business.'

"I bought this large touring-car, second-hand. I have used it almost daily for three years, and it has more than doubled my business," a market gardener told me. 'I live a dozen miles from my city, my work is largely wholesale, and I make as many as three trips daily. I load my machine the evening before, have material for one or two more loads in the packing-house ready, and I am able to make the three trips before noon.'

"We have twenty-five cows; we live back about six and one-half miles among the hills," another farmer said; 'I also haul the milk for one of my neighbors. We are shipping to a city about one hundred miles away, and the auto has made it possible. We use the machine over the roads nearly every day from seven to nine months in the year, and, aside from tires, oil and gasoline, our expenses have been small. It would have required the larger part of the forenoon to make the trip, and we can do it now nicely after breakfast, in about an hour.'

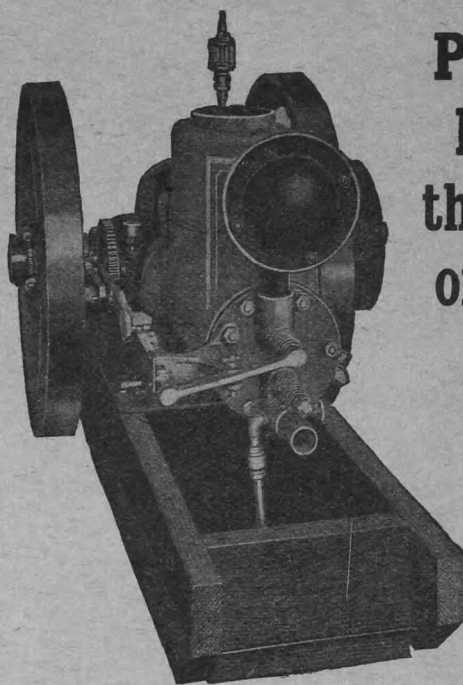
"I have three farms," another auto-owner said, 'and I am able to keep in touch with what is



"Wot's the matter?"

"I dunno; the 'M.O.' calls it Nostalgia."

"Well, why don't yer go an' have 'em out?"



Purchase Your Engine from the Standpoint of Quality and Economy

If you are an engine expert you will buy an engine depending on your own examination or from specifications. If you need an engine and know nothing of the finer points you will rely on the company that you buy from—in either case you will find the

U. G. G. 3-Horse Kerosene Engine is most economical

because it is built with the actual hard farm uses in mind—built in a way that practically eliminates repair parts—built to burn Kerosene under all loads.

The 3-horse U.G.G. is the most popular size—it has sufficient power to run all the usual light farm machinery. E-51 3-horse Kerosene Engine, Webster Magneto, weight 625 pounds, Winnipeg \$116.90, Regina \$119.50, Saskatoon \$120.00, Calgary \$121.35.

Examine catalog for complete details, or write for a special folder.

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are two guiding principles in all business intrusted to us as Executor, Administrator, Trustee, Guardian, etc. We offer a service that is established and directed with the idea of practical assistance.

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WE PAY THE EXPRESS

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SHIP YOUR EGGS TO US

The Tungeland Creamery Co.

Brandon, Man.

doing on these farms each day. There were, at times, two or three weeks during which I would not see more than one of these farms. To make the trips, it would have required a half a day at least, and now I make daily visits to one or both farms. It pays me to keep in touch with what is doing.

"I am thoroughly familiar with the machine," a woman said, as she tugged at the tire. "I have just had a blowout and am going to vulcanize the break, and put on that new outer casing." The woman explained her husband's business: "We have a small farm, and we market our products in a small city eight miles from home. We find that we can supply our trade quickly, and the expense is much less than with horses. We have developed an egg-business of some proportions. My husband goes to inland towns regularly, secures the supply of country merchants, and wholesales them to grocers in the city. He finds that he can do this business with profit on a margin of a cent a dozen. We buy considerable fruit and vegetables to supply our trade, and the machine has made all of this business possible and profitable."

ERGOT IN GRAIN

By V. W. Jackson, Professor of Botany, Manitoba Agricultural College

GRAIN inspectors, millers and commission men are calling attention to the great amount of ergot in rye that is coming in. This was to be expected because the season, toward the close, was favorable, as was shown in the remarkable development of wheat rust about the middle of August.

Ergot also is a plant disease, but differs from all other fungus diseases in producing hard, black lumps which resemble somewhat the seed of the grain. These hard black lumps resemble burnt wheat, and some people suppose them to be some vile weed seeds, whereas they are just the vegetative stage of the fungus disease called ergot.

These hard lumps are always purple on the inside, and, in this way, they can be told from burnt wheat or burnt rye. They are also about twice the size of the grain itself, and this enables millers to screen them out if they are not broken, but very often they are broken during threshing, and then it is difficult to screen them out.

This year, millers report about 50 per cent of them being broken. The miller is concerned, because they not only darken the flour, but they contain a strong drug called Ergotum, which has a detri-

mental effect on the nervous system. Cattle eating ergoted hay are troubled with abortion, and, in Central and Eastern Europe, where the people live upon black bread or rye bread, it is well known that ergot, which is very plentiful in rye, produces dire results; hence the millers are inclined to reject samples of grain with ergot which they cannot screen out.

Rye is most susceptible to ergot; barley next, then wheat. It is never found on oats, but is found on many grasses, the worst of which is Blue-stem or Blue-joint (Calamagrostis), a tall-grow-

ing wild grass, and the chief cause of ergoted hay.

Ergoted hay can be recognized by the dirty, oily, soiled heads of blue-stem, with little black seeds projecting. Ergot can be readily spotted in grain by its black color; usually much larger than grain; in rye, often over half an inch long, slightly bent, but having a groove the same as a large rye grain, and showing purple when broken open. These should be screened out before broken, if possible, and the millers must see that they do not go through the rolls with the flour.

PERPLEXED!



DO you wonder why? Thrown suddenly into widowhood with all its worries and cares, the ever-haunting fear is with her that she will be unable to keep the home together. If the break comes, she dreads separating from the children whom she loves so dearly.

Her husband has been dead less than a year, and the major portion of his savings has been spent for funeral expenses and doctors' bills. The real estate they hoped would some day provide a tidy little nest-egg cannot now be realized on, and the fear haunts her that she will lose what already has been paid on account of being unable to meet the instalments and taxes as they fall due.

Her position is pitiful, yet not unlike that of hundreds of others. Her husband could have provided her with a monthly income for life at the price of a couple of smokes a day had he heeded the advice of The Manufacturers Life. *If your wife became a widow to-night, would she, too, be perplexed?* Have you so provided that she will not lack funds each and every month as long as she lives? Let us tell you about our Monthly Income Policy.



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TORONTO, CANADA

Completion of this coupon places you under no Obligation:

I would like particulars as to a Monthly Income of \$....., payable to my wife.
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BE PREPARED—HAVE A BOTTLE IN THE HOUSE

Attacks of rheumatism, lumbago, neuralgia, toothache, earache, sore throat are *quickly* relieved by Hirst's Pain Exterminator. It is equally effective for relieving swollen joints, sprains, lame back and other painful ailments. Has a hundred uses—and for over 40 years used and recommended! Don't experiment—buy Hirst's the time-tried family friend—at dealers or write us.

Makers of HIRST'S Family Salve HIRST REMEDY COMPANY, Hamilton, Canada. and HIRST'S Pectoral Syrup of Horehound and Elecampane for coughs and colds.

YOUR WINTER SUPPLY OF BUTTER

By L. A. Gibson, Dairy Commissioner for Manitoba

A GREAT many householders are now storing away their winter's supply of butter. In this connection, may I offer the following suggestions:—

Have the butter made from fresh flavored, sweet cream. Butter made from very sour or stale cream will not keep properly. It will turn rancid very shortly after being made.

Be sure all the butter-milk is

washed out of the butter before packing, salt it lightly and work well to ensure a uniform color. Butter will keep better with from 1½ to 2 per cent of salt than that made with from 3 per cent to 4 per cent of salt.

Keep the butter in the coldest place possible. In winter keep it outside the house, in a shed where the temperature is low. The next best system is to put it in a glazed crock and cover it with a fairly strong brine which excludes the air.

MINNESOTA FARMER BY DAY AND NIGHT PLOWING SAVES ENTIRE CROP

L. S. THOM is a Minnesota farmer who believes in plowing early and deep. His crops were coming along fine when a hailstorm beat them down, but undaunted he started immediately to replot his ground to put in a second crop. In order to get his crop in as early in the summer as possible, before harvesting began in his vicinity he ran his 8-16 Avery Tractor outfit with a headlight in the front and one in the back, continually eight days and nights, stopping only for fuel and water until his work of plowing was done. He realized quick action was needed, and by running shifts the work was accomplished with the aid of his Avery Tractor in short order.

He started out the previous year, and says he plowed eighty acres of the hardest plowing he had ever seen, pulling three 14-in. bottom plows 6-in. deep with his 8-16 Avery. Another time he pulled a potato digger, and in the forenoon of one day gained seventy-two rod runs on the horses. He also hauled 3,500 bushels from the field to the cellar, a distance of about 1½ miles, four loads at a trip with 90 bushels to the load, or 360 bushels in a trip. At another time he pulled a 15-in. Ohio Cutter, filling two 150-ton silos in six days, these silos being 40-ft. high.

This was just some of the work he accomplished in the first sixty days that he had his tractor last

year. The silo filling could not have been done by horses.

Mr. Thom says a man can farm cheaper and more successfully with a tractor than with horses, and is also relieved of having so much hired help about the place.

He reported some actual figures on the cost of this work with the tractor and what the probable cost with horses would have been. He said if he had done this same work with horses it would have cost him two-and-half times as much as it would with motor power. The tractor would haul four loads of potatoes from the field to the root cellar at noon while the horses were eating, and again at night when the horses were taken to the barn for rest. He could not have plowed his land at night after the hail had destroyed his crops if he had used horses, but by using his Avery Tractor he got in his second crop in time to allow a good growth before the heat and burning sun of the dry summer season.

Every farmer knows the value of plowing deep and early to conserve the moisture. The slogan, "Work Will Win the War," was surely lived up to by this Avery owner. To see the quantity of crops he secured through the result of his second planting is a good illustration of the ammunition one American farm is hurling at the enemy.

THIS IS THE TIME OF YEAR TO BUY SHEEP

FOR the past three or four years the farmers who keep sheep have made very large profits. The price of wool is at least five or six times as high as it was before the war broke out, and there is every reason to believe that even after the war has closed there will still be a good wool market for some time to come.

One reason for this is that the war has been on so magnificent a scale that it will mean a long period of khaki wearing before all men are re-established in the pursuits of peace. Together with this is the awful slaughter of European flocks, which were a considerable factor in wool growing.



Just Getting Over the Flu?

Feel a little shaky? Still have that stuffy feeling? Head a little heavy?

MALTON STOUT
(Registered)

—will hasten your recovery. Order a case to-day and start drinking—one or two glasses daily.

This healthful beverage starts toning up your system at once; builds up what the has torn down.

Meanwhile, you are enjoying the full, rich flavor of this delicious drink.

Pure, wholesome, positively non-intoxicating, Maltum Stout should be in every home.

Put up in quarts, pints, half-pints or in casks. Order from your grocer, druggist, confectioner, or direct from

F. L. DREWRY, Ltd.
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GILSON—"JOHNNY-ON-THE-SPOT"

This Big 1¼ h.p. Engine only
\$78.50

(For self-starting magneto, add \$10.00)



"MADE IN CANADA"

A BIG, little engine, that "Goes Like Sixty" at every light and medium heavy job on the farm. A heavy worker, and a light eater—dominating in Quality and Service. The biggest selling engine of any size in Canada—quantity production enables us to undersell all competitors—quality considered.

Do not buy a cheap engine—buy a good one at a quantity price. All sizes at proportionate values. Write to-day for free catalogue stating what size engine interests you.

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FOR SALE—Daisy 32 x 50 Separator, with blower, feeder, and high weigher. All new belts, and 120 ft. 8 in. drive belt, used two days. Complete, ready to run. \$400.00. F.O.B. Botha. Wm. Drewes, Botha, Alta.

EXPERIENCED MAN AND WIFE for position on farm. Returned soldier. Holds second class engineering certificate for Saskatchewan. One child of ten.

FOR SALE—Cockshutt ten gang Engine Plow with breaker bottoms, all in good order; also 110 H.P. Engine rebuilt in first class shape. Apply R. A. Wright, Drinkwater, Sask.

FOR SALE—20 H.P. I.H.C. Type C Gasoline Engine. Also 22-38 Separator, bolts in good condition. Rose, c/o Box 3164, Winnipeg.



NORTH STAR DRY BATTERIES

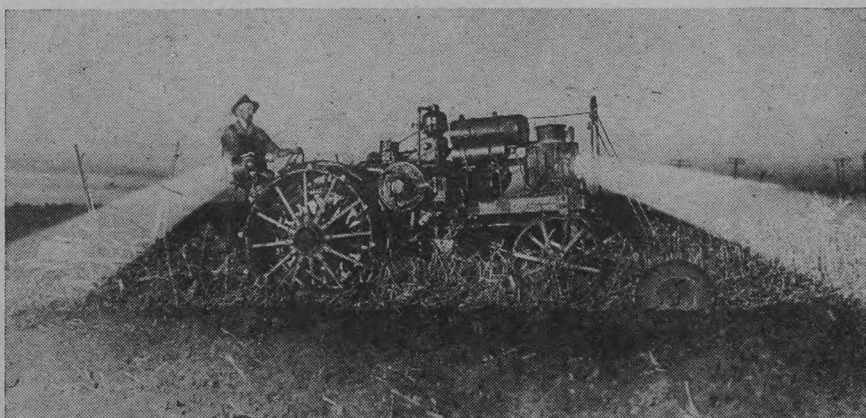
Topmost in Quality

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ETC. CAREFULLY INSPECTED
AND TESTED.

ORDER FROM YOUR DEALER



In Manitoba different farmers have wintered young wethers over on the profits from the increase in weight and the next spring's wool clip. On the other hand some farmers who are overstocked with breeding females have to sell some of them and these sometimes go to the Winnipeg market just at the time when they would be the very best kind of buying for the other farmers of the neighborhood.

Right now this is going on to some extent. This is the best time of year to begin a flock by buying a few young ewes.

NEW MANITOBA BULLETIN ON WEEDS

A NEW 54 page illustrated bulletin entitled "Lessons on Weeds" has just been published by the Manitoba Department of Agriculture. The author is V. W. Jackson, Professor of Botany at Manitoba Agricultural College. Professor Jackson has written this bulletin not only with a view to making it useful for the farmer, but also has considered its adaptability for schoolroom purposes.

The illustrations are profuse, and they not only depict all the well-known weeds of Manitoba, but in some cases illustrate the individual peculiarities which enable the reader to differentiate between kinds that are easily confused. A three-color plate shows the Toad Flax, a wild snapdragon, which was added to Class 1 of the Noxious Weeds Act in 1918, and which has spread in rather a remarkable way during recent years.

In addition to the treatise upon weeds that bother in the fields, on the roadways, and in the gardens, there are illustrations and descriptive articles regarding the poisonous plants of the province.

Several pages are devoted to instructions regarding exhibits of weeds and hints to correspondents who wish to send samples of identification.

Free copies of the bulletin are obtainable from the Publications Branch, Department of Agriculture, Winnipeg.

SAVE YOUR WOOD-ASHES

(Experimental Farms Note.)

THE experience of many generations of farmers and gardeners has proven the high value of unleached wood-ashes as a fertilizer, especially for clover, corn, farm roots and vegetables and fruit crops generally. Wood-ashes contain no nitrogen and supply no humus, but as far as mineral plant food is concerned there is probably no compounded

mineral fertilizer on the market that is more effective and more lasting. They furnish potash, lime, phosphoric acid—the very elements taken from the soil by the forest trees, and, returned to the soil they will supply, in the very best form and combinations, the mineral plant food required by our crops.

According to analyses made by the Division of Chemistry, Experimental Farms, unleached hardwood ashes, free from sand, etc., will contain between 5 and 6 per cent of potash, about 2 per cent of phosphoric acid and from 20 to 30 per cent of lime. Before the war Germany supplied all the potash used for fertilizing purposes; since that supply has been cut off potash has tremendously increased in price so that now it is worth almost ten times what it was in the early part of 1914, and as a consequence it has practically disappeared from commercial fertilizers. The potash in 100 pounds of good quality wood-ashes is now worth from \$1.00 to \$1.50.

Owing to the scarcity and high price of coal, farmers will be burning more wood this winter than has been customary for many years. We counsel them to save carefully the ashes from their stoves, storing them in a dry place protected from the rain. Leached ashes contain very little potash, for this element is readily soluble in water.

The soils most benefited by wood-ashes are light, sandy and gravelly loams, and muck and peaty soils. They are also especially valuable for sour soils deficient in lime. The application may be from 600 to 2,000 pounds per acre, preferably broadcasted in the spring on the prepared land before seeding and harrowed in.

HAIL INSURANCE EXPERIENCE IN ALBERTA

THE Hail Insurance district of Alberta has now been in operation for five years. The district comprises 26 municipal districts and embraces a total area of somewhat over four and a half million acres.

The losses payable by the Hail Insurance Board for damage by hail throughout the Hail Insurance district during the past season, were in round numbers \$160,000. The revenue required to pay these losses is derived from two sources, first the flat rate of 5c per acre on all the assessable land in the Hail Insurance district. This flat rate is fixed by the law at 5c an acre and was levied during the spring of this year. The balance required is obtained by a levy of a rate per acre on all the land under crop during the season. This rate was fixed on Octo-



SEND FOR FREE ILLUSTRATED FOLDER

Telling you all about the opportunities in the beautiful CHILLIWACK VALLEY, Garden Spot of British Columbia—the place where a small farm, near a progressive modern city means HEALTH, HAPPINESS and INDEPENDENCE for you and yours.

No extremely cold winters, no excessively hot summers, no drouth—NEVER A CROP FAILURE. A mild equable climate that is a delight to live in the whole year round.

Grand scenery, good roads, good railroad transportation, schools that are second to none. Attractive lakes, rivers and mountains all about you—JUST THE PLACE FOR YOUR PERMANENT HOME, the spot to spend your reclining years in contentment and prosperity.

Big profits from dairying, fruit raising, berry raising, poultry raising and general farming. Big waiting markets nearby, including the wonderful city of Vancouver—metropolis of the West—and the modern city of CHILLIWACK, which also offers you every city advantage, with telephones, electric lights, rural free mail delivery and gravity water supply right on your farm.

WE WILL BUILD A HOME FOR YOU, plow the soil, plant trees, berry bushes, shrubbery and crops—having the place all ready for you to move into.

WRITE AT ONCE FOR FREE AND COMPLETE INFORMATION

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"MONARCH" NORTH-WEST GUARANTEED BOB SLEDS

Strong—Heavy—Durable—The Most Substantial Sled Made

7-ft. x 6-inch Runners	2-inch Steel Shoe	2-inch Cast Shoe
	\$37.00	\$41.40

2 1/2-inch Steel Shoe	2 1/2-inch Cast Shoe
\$41.50	\$47.50

Order direct and send for our Catalog of Engines and Power Equipment, Washing Outfits, Pumping Outfits, Saw Frames, Line Shafts, Belting, Cream Separators, Pumps, Harness, Blacksmiths' Supplies, Plow Shares, Roofing, Hardware, Fanning Mills, Bob Sleds, Wagons, Buggies, Grain Elevators, Churns, Incubators, etc.

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MORE HEAT—FEWER ASHES—LESS LABOR

The New Method Fuel Saver is not a damper like some others are, but it is a gas consumer; through supplying the fire with heated air we burn up the gases, which are, under ordinary conditions, wasted.

Guaranteed to save from 25 to 40 per cent of fuel if operated according to instructions and can be installed on any kind of heater, furnace, hot water or steam plant for very little money.

If your dealer cannot supply you, write direct to us.

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HART-PARR TRACTOR

Reserve Power for Heavy Work

The Dray Kerosene Shunt, an exclusive Hart-Parr feature, enables the tractor to develop more power than any other tractor its size. It is guaranteed to do as much or more work on kerosene as can be done on gasoline.

Prompt Delivery Guaranteed.

Write for Full Details and Price.

Hart-Parr of Canada Ltd.

Winnipeg Saskatoon Regina Calgary

ber 1 by the Hail Insurance Board at 8c. per acre.

The losses of this year were the lowest of any of the five years since the Hail Insurance Board was formed. The losses for the five years are as follows:

1914.....	191,173
1915.....	358,469
1916.....	565,897
1917.....	468,897
1918.....	158,122

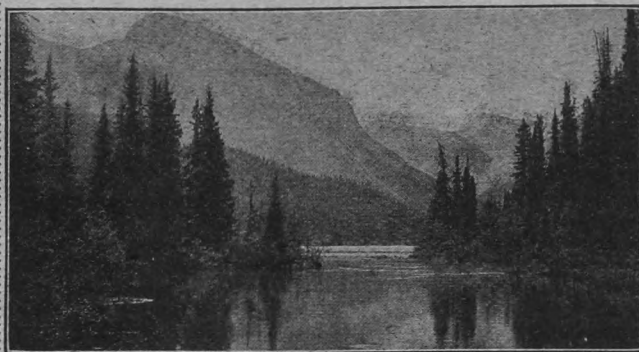
As said above, the plan has been in operation now for five years. Naturally it was very much in the nature of an experiment, but the results have justified the experiment. During the five years the total amount of insurance carried was over \$32,500,000. The total losses paid for the five years were \$1,760,000. The costs of administration were about \$100,000. The total cost of carrying the \$32,500,000 insurance was, therefore, about \$1,860,000. The cost of insurance under the plan this year was a little over 3 per cent and the average cost for the five years was a little over 5½ per cent.

There are some features of the plan under which the present district is working that are not as satisfactory as they might be and it is probable that the present Hail Insurance district will be disorganized some time next year. At the next municipal elections the new plan of municipal hail insurance as provided by the Hail Insurance Act passed at the last session of the legislature, will be submitted to the ratepayers of the municipal districts, and if the plan is approved by 45 of these municipal districts, a new Hail Insurance district will be formed to work under the new Act. It is believed that the new plan has eliminated practically all of the objections of the old plan. The plan has been approved by the annual convention of the U.F.A. and the Alberta organization of Local Improvement Districts and Rural Municipalities, and it is believed it will commend itself to the farmers of the province.

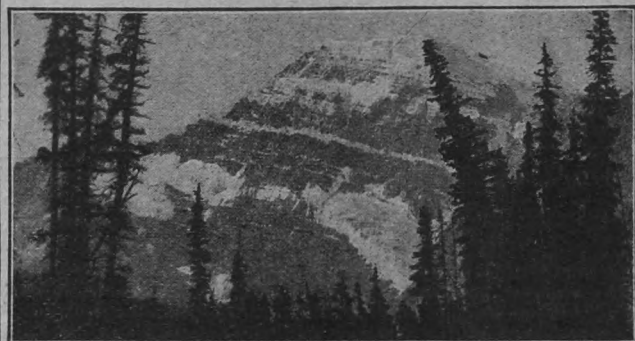
There are two radical changes proposed in the new Act, one is that all the revenue required will be levied on the crop area only, so that the cost will fall entirely on those who receive the benefit. The other is that the farmer may insure his crop for either \$6.00 or \$8.00 per acre, or he may, if he desires, withdraw any part or all of his crop from the operation of the Act entirely. This removes the idea of compulsion almost entirely from the plan, which is one of the great objections urged against the present Act.

If the new plan is approved and a new Hail Insurance district is formed, the head offices will be moved to Calgary.

SCENES ALONG THE Canadian Northern Railway



JACQUES LAKE, ALTA.



MOUNT EDITH CAVELL.

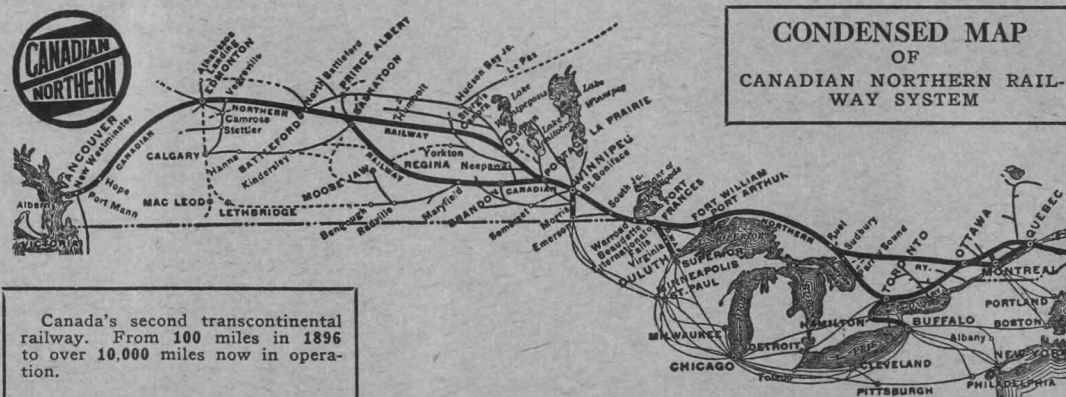
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Standard Electric Lighted Trains between Montreal, Ottawa, Toronto, Winnipeg, Edmonton and Vancouver, via Yellowhead Pass through the Canadian Northern Rockies

THE NEW SCENIC HIGHWAY—SNOW-CAPPED MOUNTAINS MIRRORED IN EMERALD LAKES—RUGGED RAMPARTS REARED AGAINST AZURIC SKIES—HEADLONG TORRENTS DASHING THROUGH PRIMEVAL FORESTS.

Compartment Parlor Observation Cars between Winnipeg and Toronto; between Edmonton and Vancouver. Through Standard Sleeping and Tourist Cars, Toronto to Vancouver.

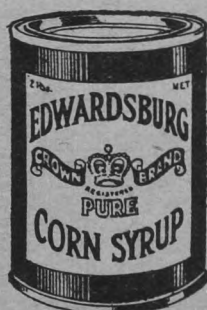
For descriptive literature and all information write to any agent, Canadian Northern Railway, or R. Creelman, General Passenger Agent, Winnipeg.



Save Sugar!

Don't use Sugar where Corn Syrup will serve your purpose as well or better. The ships that carry sugar are needed for soldiers and their supplies. Crown Brand and Lily White Corn Syrup are delicious, wholesome and economical alternatives for sugar in pies, puddings and preserves; as a sweet sauce and on cereals.

Use CROWN BRAND CORN SYRUP



The most nutritious part of the corn converted into its "sugar" or syrup form, with the added flavor of a little cane syrup.

LILY WHITE CORN SYRUP

For use where the Food Board Bulletin calls for Corn Syrup (White)
Delicious for table use and cooking.

In 2, 5, 10 and 20 lb. tins, at all dealers

CANADA STARCH CO. LIMITED

MONTREAL



OUR WOMEN FOLK

CONDUCTED BY
PEARL RICHMOND HAMILTON

THOU DOST BUT LEND

By Cora Lapham Hazard

Give thou with lavish hand ungrudgingly
Thy choicest seed into the sullen soil.
Thou dost but lend; it smiling will repay
A thousandfold thy bounty and thy toil.

Give thou unto the world unstintingly,
As sower dost, of thought and deed thy best,
Thou dost but lend; for back to thine own life
They will return, and thine own heart be blest.

THE GIFT

By Gladys Hyatt Sinclair

Graved in the diary of common days,
'Mongst things erased, rewritten, blot-
ted, blurred,
I thank Thee if throughout my record
strays
The kindly word.

I thank Thee if within my quiet home,
Or through the marts where clash of
trade is heard,
I leave, to mark the narrow ways I roam,
The kindly word.

No torch is mine, to scatter world-wide
gleams;
No thought of mine has mighty issues
stirred;
I thank Thee that, to light my pathway,
beams
The kindly word.

Thy light be in the torch that flames
afar!
They might be with the men by Fame
preferred!
Mine be to break Thine alabaster jar
The kindly word.

FOR OUR TEACHERS

Since we have so many teachers among our subscribers, this department from time to time will feature their work. Why should we not, since our teachers are next to our mothers in the training of children, and we feel that the mother and child own this department. It belongs to them. Anything that will help them is our mission.

WHERE DUTY CALLS

OUR teachers have responded nobly to the call for nurses. The other day one of our teachers in a foreign community called me up and told me her school had closed because of the influenza, but she was going back to nurse the people who were sick. I asked if she were not afraid. She seemed surprised at my question and answered quickly: "Why no. It is my duty to help in every way I can. I am under the guidance of a Higher Power." I know many teachers in the foreign schools who have the same true spirit of patriotism. It is up to everyone of us to encourage in every possible way the great educational movement Dr. Thornton has started and prompted in this province. He and his helpers are accomplishing marvellous results in the educating of our boys and girls and men and women to true Canadian citizenship. His teachers and all of his helpers are

entitled to unanimous support, and any underhanded political scheming that would sacrifice the welfare of our children in foreign communities is nothing short of a national crime.

President Wilson spoke wisely to his own people when he said: "Schools, as usual, and more than usual." It is imperative that we devote our energies to the education of our boys and girls. Every child has a right to an education. Our nation needs educated men and women. We can supply artificial limbs

AT SCHOOL AND AT HOME

My teacher doesn't think I read
So very special well.
She's always saying, "What was that
Last word?" and makes me spell
And then pronounce it after her,
As slow as slow can be.

"You'd better take a little care"—
That's what she says to me—
"Or else I'm really 'fraid you'll find,
Some one of these bright days,

Some one o' these bright days!
Mother, you come and hear this child,"
That's what my grandpa says.
—Elizabeth L. Gould in St. Nicholas.

LITTLE CITIZENS

Etta V. Leighton in Primary Education

GOOD health is a patriotic duty. Beginning in September, every teacher can see to it that for the coming year our little citizens grow, not only wiser and better, but stronger. Let us plan to make this health work a happy constructive activity.

Begin with the morning inspection, before the Flag Salute every day, so that if any "unfortunate" is not fit as he can be, he can stand outside until the Flag Salute is over. Discretion and tact are needed, but the value of implanting the thought that we must be as clean and upright as possible in order to be worthy to salute our flag, is too good a lesson to be lost. Teachers must distinguish between sentiment and sentimentality. No one, not even the culprit, is any better off because he was allowed to salute the flag, raising a dirty hand to a touzled head. Half of the untidiness of children is their own fault, due to their carelessness, not to the poverty of the parent. Just as the soldier must maintain a neat appearance and care for his clothes, so must all patriotic citizens, big and little.

In addition to the morning quotation, the Flag Salute and morning song, let the grades beyond the second, recite the following pledge:

Pledge

I am a citizen of I will do nothing to desecrate her soil, pollute her air, or degrade her children, my brothers and sisters. I will try to make her beautiful and her citizens healthy and happy so that she may be a desired home for myself now and for her children in days to come.

Once in a while a brief report of what each child has done to make someone healthier and happier can be arranged for. Don't let morning exercises drag. They must set the keynote for purposeful activity for the day.

The teacher is earnestly urged to plan that each child entering her room shall be physically stronger leaving it, insofar as that depends on her. In the very beginning days, she should test eyes, ears, study the condition of the teeth and note any physical defects. Medical inspection may be left entirely to us if the war goes on, and each teacher should plan to make the simple eye and ear tests and have first aid books, posture, charts, etc. The responsibility of the grade teacher is great if no medical inspector, school nurse, or physical culture teacher is provided.

Eyes

As soon as possible discover the child with weak eyes. If they need it, show the child or its older brother or sister how to use a boracic acid wash—insist that the piece of cotton that has washed the eye be not dipped again in the solution. Watch the children to prevent their rubbing their eyes with grimy fingers. Infectious eye diseases, of course, call for exclusion from the school. Think of the strain we put on the eye muscles that adjust the eye to short distances. Out of doors the children at their play look at near objects for the most part. Now it has been found that strengthening of the eyes can come from a change of muscles. Why not in school sometimes ask the child to look out of the window and describe what he sees

Ladies of the Farm Homes Will You Help?

THE only feature of the Victory Loan campaign which is giving concern is the relative slowness of the returns from the country districts.

For this there is one plain reason. It is not that the spirit of the country is not excellent. It is not that the attractiveness of the loan as an investment is not fully recognized; the whole trouble is the prevalence of influenza, which has seriously affected the campaign organization throughout the West. It has disrupted the campaign committees in many districts, and has made the individual canvass that had been planned impossible.

Under these conditions, a special obligation rests upon the INDIVIDUAL. It is for each person to see to it that her subscription is forthcoming and for the largest amount that she can afford. Where the committee is unable to carry out its programme, the individual should attend to her own application for bonds, addressing either to the local banker or to the district committee.

The money is urgently needed to maintain the prosperity of the country and to pay the war expenses of the nation which must be met. With the prospects of peace, the loan becomes increasingly attractive for two, among other, reasons: One, that the bond becomes immediately a more profitable investment; the other, that the money now being raised will bring the boys-home.

for crippled legs and arms, but there is nothing that can repair the loss of educational opportunities and training.

Let us double our efforts in behalf of the children born under our flag. Let us as individuals—as members of Daughters of the Empire, H.E.S., Grain Growers, and all other women's organizations, do everything in our power to help the splendid educational movement Dr. Thornton is promoting with such sincere and intense regard for our future citizenship.

You're way behind the primer class,
That's what my teacher says.

But when I'm at my Grandpa's house,
He hands me out a book,
And lets me choose the place to read;
And then he'll sit and look
At me and listen, just as pleased!
I know it from his face.

And when I read a great, long word,
He'll say, "Why, little Grace,
You'll have to teach our destrict school

instead of using a near picture for oral language description. We shall all be looking up for air-planes this year—let the teacher urge the children to watch the birds, noting their resemblance to air-planes—to look at the topmost branches of trees—the highest points of houses—the farthest house down the street, etc. It is felt that city dwellers seldom raise their eyes to the sky or see farther on than the next block.

If there are squinters, or cross-eyed children, the teacher should try to have them receive medical attention. Dramatize this work on the eyes.

Have the "Little Mother" putting the babies to bed when another little mother comes. Have the little mother who is calling brought in to see the babies in bed, and have her object to the light being left in the room. Even with the eyelids closed, light in a room is a strain on the eyes. Have the shade drawn so that the early morning light will not fall on the sleeper's face. If a light must be left for sickness, see that it is shaded. Have the dialogue show that an oil lamp eats up the oxygen in the air, and that in the long run the oil used would cost more than a little flash-light. The "mother" can open the window so that ventilation without a draft is provided and some remark can be made about light, but warm bedclothes, and about watching to see that children are not sleeping with open mouths, which would mean adenoids, and calls for the doctor's attention. The children lie on their right sides. Some mention of the preparation for sleep, washing face and hands and teeth, etc., placing clothes to air, and handy for the morning, etc., can be made.

It is strongly urged that the dialogue be not written and learned, but be spontaneous—the expression of the lessons talked over with the teacher. However, if the little play is part of an entertainment for mothers, a certain amount of drill will fix the dialogue, which in this case had better be predetermined on by the children and written by the teacher. If given as a play, the Little Mother can sing the child to sleep or tell the bedtime story. I would emphasize this—the sentiment developed at the mother's knee lasts through life. The little play could raise the standard of healthful sleep in the neighborhood.

Ears

The ear has never received the attention due it. Many a Little Citizen has lost his chance in life because he has been considered stupid and dull—in big systems he has been considered stupid and dull—in big systems he has actually been shunted into classes for defectives because he was deaf and heard only part of what was said. Of course such children should be seated near the teacher. Also it should be learned in which ear the hearing is better, and they should be seated so that that side is nearest the teacher. They should be encouraged to watch the teachers' lips, and to learn to read the lips. They should feel free to say "I didn't hear you, Miss—," or "Please repeat," with the glad knowledge in their little hearts that the teacher will pleasantly tell them again or that the little comrade in the class will repeat his explanation. So much good can come to a class that the presence of a deaf child is almost a blessing. If the teacher, because of his presence, enunciates more clearly, if the children do likewise, and if all learn that kindly consideration which should be shown to deaf people, but which so often is not shown, the whole school will benefit.

Teeth

It is hardly necessary to mention teeth in a classroom now, since as a nation we are devoted to the saving of our teeth. It will do to remind the children that the condition of the soldier's teeth is most important, and that as the soldier will on no account neglect his teeth, so they must not neglect theirs.

Throats and Noses

Their throats and noses should be examined by a physician and adenoid cases looked after. The teacher's responsibility in the prevention of adenoids can not be escaped. She must tell and tell again that sucking objects like nipples and rubber rings, etc., is said to cause adenoids to grow. Little mothers can be warned. The smaller children can play

father and mother and physician and patient and can explain that wet feet give colds and sore throats, and many cause earache and deafness, and they can work in very nicely the care of the nose, and the necessity, if one has a running cold, of using paper handkerchiefs and burning them. They can "take a little ride on a railway train" and see that their numerous children blow their noses when they "get off."

It should be explained that nose and tongue guard us from dangerous decayed food, etc., and there is opportunity to impress the pleasure to be obtained from the sweet odors of cleanliness and for the sake of refinement to warn against heavy odors. I'd say outright that most of the heavy perfumes come from the East where they are used to disguise the odors of unclean living conditions.

UNITING THE CLASS

Lilian H. Rifkin

I found this device worked well in a class which was difficult to discipline.



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USE IT IN ALL YOUR BAKING



It also brought the members of the class closer together.

Tell the class that you are going to pretend that the classroom is a camp. Allow the pupils to choose the name of the camp. Each desk is a tent, which must be kept in perfect order.

Allow the class to suggest different names of the pupils of the various officers of the camp. Vote on the names and the student who receives the highest number of votes is the head of the army, and so on, through the list of officers which the teacher thinks she can make use of. The teacher should give various duties to these officers; for instance, the commander should call for attention and order as soon as the class assembles. The chaplain should lead in the morning prayer.

Allow the girls to be Red Cross nurses and let the class choose a head Red Cross nurse. The duties of the Red Cross nurse should be in terms of "healing the wounded." Such things as telling other members of the class, who may be sitting carelessly in their seats, to sit up in good position should be the work of the Red Cross nurse. Beautifying or restoring

the scenery of the battlefield should also be the work of the Red Cross nurse in such duties as washing boards, dusting the teacher's desk, etc.

The teacher should live this as much as the children, and, teacher, don't forget the children do not come home from dinner, but they return from "mess."

A COAL STORY—FOR FIRST GRADES

A rhyme to be learned as an introduction to the lesson:

I am as black as black can be
And yet I shine.
My home was deep within the earth
In a dark mine.

Ages ago I was buried there
And yet I hold
The sunshine and the heat which warmed
The world of old.

Though black as I do seem to be
Yet I can glow.
Just put me on a blazing fire
Then you will know.

Lumps of coal on the table in turn tell their story as follows:

I am your friend. My name is soft coal. Once I was a plant. I grew in a swamp. I grew very fast. I had much carbon.

It was wet in the swamp. It was warm in the swamp. One day the water came up. It was almost to my head. Next day it was deeper. It covered me up. The water put sand over me. Then the rocks rolled over me. I was warm. I was pressed close. I turned brown. Then I turned black. I am black now, you see.

I stayed there a long time. The water was over me. The rocks were over me. I went to sleep.

One day the water went away. The sand got dry. A man dug a hole through the sand. He saw me. He said, "I want that coal." That was my new name. He broke me in pieces. He said, "I will send coal to school." The children will put it in the stove. It will burn. There will be a bright flame. There will be black smoke. It will make heat. The children will be warm.

Another lump said:

I am hard coal. I grew in a swamp, too. I was pressed harder than my brother. Heavy rocks were over me. I was warmer. I grew harder. I was more shiny. The man found me, too. He sent me here.

I will not burn in your grate. I must have a close stove. My flame is blue. I make but little smoke. I throw out gas. My gas will choke you. You must keep me shut up when I am burning.

The next lump said:

I am cannel coal. I am not so hard as my brothers. I grew in the swamp with them, but I was not pressed so hard. I am black, too. But I am not shiny. I will burn in a grate. I make a long, bright flame.

The last lump said:

I am not coal. I am plumbago. The coal is my brother. I grew in the swamp with the coal. I am soft. I am black. I do not shine. I will not burn. Some people call me graphite.

I come to school. You will not find me in the stove. I stay in your pencils. I help you get your lessons.

All the lumps together said:

Once we were plants. Water covered us. Rocks pressed us. Earth heated us. Now we are minerals. We keep you warm. We help you to work.

Different pupils may personify the different lumps, when the words have been well learned and a very pretty exercise be made from the reading lesson.—From Journal of Education.

THE HAPPY ATMOSPHERE

Of course, our schools, especially our elementary schools, are happy places. Every teacher of to-day knows how sensitive the child mind is and what a blight fear can cast on the intellect, so the children rest secure in her loving interest. They know they must behave and be good children, not because the teacher will vent her wrath if they do not, but because that is all there is to do. After all, when we sit

down and think over the happenings of the day, we often see that a move in time on our part would have prevented opportunity for naughtiness. Children are not angels—they will do wrong and teachers must scold and punish, but the general atmosphere can be that of a happy home—only in such an atmosphere can healthy minds grow.

MOTHERS' CORNER

NOW AND THEN

By Floy Crosby Smith

Little downy baby head, nestling on my arm,
Mother guards her baby now, shielding him from harm.
As you travel down the years, through the world of men,
Little darling baby head who will shield you then?

Little tender baby feet, cuddled close in sleep,
Life's long journeys you will find thorny rough and steep.
Many pathways lead to night, only one to-day,
Little straying baby feet can you find the way?

Little clinging baby hands, never, never still,
For its work the world demands endless strength and skill.
In the battle being waged 'twixt the wrong and right,
Little restless baby hands have you strength to fight?

Little trusting baby heart, knowing naught of care,
Grief and disappointment come, burdens you must bear.
Though your trust may be o'erthrown, hope and courage gone,
Little steadfast baby heart God will lead you on.

NOTICE: TO THE MOTHERS OF OUR CONTEST

THE winners of the contest will be announced in the December number, the issue of which is to contain a surprise for our readers. The winners, however, will be notified before then when their prize money is forwarded. The babies were such splendid children, so well developed and so charming that the decision is not easy to make. Our mothers deserve great credit for the excellent care they use in developing healthy children. The contest has proven so popular that we are starting a new contest, and trust the response will be as successful as the one just closed. So many letters have come to us from mothers expressing the great help this contest has been to them that we feel we must open another contest. One contestant says: "God bless every mother in our Corner." I would add: "God bless and prosper every mother in Canada.—P.R.H.



Sammy: "Say, marm, can I have a look at the mail?"

Y.M.C.A. Helper: "What is it you want?"

Sammy: "Well, I've posted a letter to my girl and addressed it to the other one."

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The best furs look better and last longer than ordinary furs. Your money could not buy better furs, because better furs are not made. Our own expert furriers are close followers of fashion. Selected skins are carefully made into stylish and distinctive fur sets and coats for ladies and fur coats for men. Every garment is guaranteed to give satisfaction and our own special Western Fur Catalogue and mail order department make it very easy for our out-of-town customers to purchase furs from us. You must be satisfied or your money will be refunded.



Women's Fur Coats

NATURAL MUSKRAT COATS—45 inches long. Choice, heavy, full-furred, prime skins, dark in color and perfectly matched. Have extra deep, large storm collars, and lined with heavy brown Venetian. **\$150.00**
All sizes

MINK MARMOT COATS of exquisite quality. Skins very soft and pliable and heavily furred. A perfect storm and cold weather resisting garment, 50 inches long. Large storm collar and deep cuffs. **\$90.00**
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SOUTHERN BEAVER COATS (or otherwise known as Hair Neutria Beaver) have the appearance of an unplucked Canadian Beaver coat, a most serviceable and dressy garment, 45 inches long. Has large storm collar and deep cuffs and a strong Venetian lining. **\$135.00**
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Women's Fur Sets

TAUPE FOX—Large Animal Stole, selected quality fur, and trimmed with mounted head, four paws and tail, lined with soft silk same color.... **\$30.00**

Large Animal Muff **\$30.00**
to match

ALASKA SABLE Cape Stole—Has deep, rounded-shaped back, 12 inches deep, is 10 inches deep over shoulders, has long roll effect in front, fastens with two Hudson seal buttons, lined with best quality soft silk. **\$92.50**
Price

New Style Large Canteen-shaped Muff to match. **\$75.00**
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HUDSON SEAL Shoulder Cape—A very useful and warm wrap. Very deep in back and over shoulders, and comes down to waist line in front. Has large roll shawl collar and it is lined with soft black silk. **\$75.00**
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Canteen Muff to match **\$30.00**

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MEN'S DRIVING COATS—Made in Natural Grey Mountain Goat. All joinings are especially reinforced with leather. Has extra large collar and lined with quilted farmers' satin. All sizes..... **\$45.00**

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MEN'S BLACK BEAVER CLOTH OVERCOAT—Lined with dark Mink Marmot throughout, and has large Canadian Otter shawl collar. This is an exceptionally dressy coat and will give good service **\$125.00**
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**WINNIPEG
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PROCRUSTINATION IN
BUYING BONDS IS
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The following excellent letter was omitted last month:—

Box 65, Wiseton, Sask., Sept. 30, 1918.

Dear Madam;—I am enclosing description and some photographs of my quartette of boys and some of my own experience with babies, what I have observed and experience of others, which I hope will be useful to some. I have no photograph of Maurice.

I have nursed them all for a few months, but sooner or later had to feed them from the bottle. Sometimes I had a regular feeding bottle and sometimes only an ordinary bottle. The feeding of a child is very important. For a child up to six months I use the following: One-third cup sweet cream, not very thick, two-thirds cup fresh milk, three cups cold water, which has been boiled. To every eight ounces feed I add one teaspoon of milk sugar, which at present is expensive but advisable to use as it is more easily digested. I give a baby all it wants and can digest, but if it gets a sour stomach or the bowel movements contain undigested particles, make feed weaker and give less.

For a baby over six months, barley water can take the place of cold boiled water made as follows: Two teaspoons barley flour mixed with a little cold water to a smooth paste; add to this one quart boiling water and half teaspoon of salt; cook in double boiler two hours. For a child of nine months use one tablespoon barley flour. For a child of one year, two or more tablespoons of barley flour (Robertson's I use). If bar-



Charles Alexander, Donald Edgar, and Harold Edward Nickason

ley flour is found to be expensive the following can be used: Pour one quart water over one cup rolled oats, stir well, pour off liquid through strainer and cook liquid in double boiler two hours, add half teaspoon salt for child of six months. For a child of nine months use two cups rolled oats to one quart water. For a child of one year make a thin porridge. The rolled oats need not be wasted as it can be cooked for the family's breakfast as porridge. Remember the barley water and oatmeal water is to take the place of the cold boiled water with the milk and cream mixture sweetened as described. A child of nine months can be given granulated sugar in place of milk sugar, but only about quarter of a teaspoonful to one of milk sugar. A child over one year can have bread and milk, codded egg and bread, fruit, porridge, some potato and as it gets stronger and older, meat can be added to the diet.

Do not on any account play with a baby after it has been fed. Let it lie quiet for at least half an hour. It will take any exercise it needs.

I have had a great deal of experience with bronchitis, having had it myself from a slight attack to one bordering on death. My oldest boy is subject to it on account of my ignorance regarding the care of the penis. At first the child takes a cold or gets one somehow and if

Women this is to your Interest!

THE easy fitting stylish shoe is the shoe you should wear. "I have tried many different makes and I have pleasure in stating tis hard to beat the "Ryan" shoe." Ask your Merchant for the "Ryan" shoe.

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Chocolate Sundae Pudding

"Add the contents of a package of Chocolate Pudding to a pint of milk and make a smooth paste. Add this mixture to one pint boiling milk (previously prepared) and boil five minutes. Pour into a mould and set away to cool. Serve with whipped cream."

Our cook book is ready to mail. What address shall we use?

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**ROYAL
YEAST
CAKES**

At the age of sixteen Alice Jones wrought poetic changes in her name. She signed herself E. Alysse Jones. Thus designated she entered a new school. The head mistress asked her name. "Alysse Jones," she replied. "A-l-y-s-s-e."

"Thank you," said the teacher. "And how are you spelling Jones now?"

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it settles on his lungs he is liable to have bronchitis, broncho-pneumonia or pneumonia. The breathing will be difficult, if you listen you may hear a wheeze. If it is very faint and upon placing your ear on his lungs you hear nothing, if you do not understand the case get a doctor immediately. For a slight attack or sore throat I use menthol camphor salve. For a worse attack I use equal parts of turpentine and lard, camphorated oil is better, applied as hot as is possible and quite often, every hour. Put a soft cotton cloth next the flesh. For a severe case I use Thermofuge or other poultices of similar make. The can is put in hot water and applied to the lungs back and front and sides and covered with absorbent cotton, this is covered with a cotton jacket. This is done in a warm room and quickly. Keep the poultice hot by using hot dry clothes or hot water bottle and keep the head cool by placing another bottle containing cold water at child's head and gently fan. The temperature will be from 102 to 104 or more, pulse from 140 to 180. A cloth soaked in turpentine put near the nose helps to cut the passages open again. I have brought Charlie's temperature from over 104 down to 102 in one night. When the breathing becomes very rattly the child is safe and if it throws up it is a good thing as it removes flem. For a very small baby rub hot oil (camphor) on its chest and keep cloth soaked with turpentine at its nose. The Thermofuge is supposed to stay on 24 hours.

Another danger is summer complaint. The bowel movements will be green and very frequent and the child will soon become very sore and scalded. For this give a dose of two teaspoonfuls of castor oil in warm water in feeding bottle morning, noon and night. Give no feed for at least twelve hours and twenty-four is better. If child wants feed give warm water in bottle. If this does not cure child give dose again. Put vaseline in sore parts and cover with very thin pieces of absorbent cotton to keep the flesh from touching at any place. Give the child its feed warmed not many adults care to eat cold meals. A wire holder made to set inside and over the top of lamp chimney for warming milk can be gotten at most hardware stores.

I would just like to add that bathing the neck and chest in very cold water for five minutes night and morning will strengthen the lungs and cure bronchitis if kept up for a year or more.

The naval also needs attention sometimes a child's naval will protrude and will cause discomfort as an adult. Make a pad of absorbent cotton put over navel to press it in place and keep its binder on it until naval has returned to its proper place. I generally take their binder off at four weeks. They should be dressed loosely and warmly in winter and cool in summer, mine wear woolen shirts the year around. Heels on their shoes should be avoided. The best machine of metal and wood cannot do its best work if it does not set level, so how can the human machine do good work if it does not stand level? I do not wear shoes with heels on while at my work.

More don'ts are—don't let them suck their thumb and do not give them the comfort to suck. It will spoil the shape of their mouth.

Don't pin diapers too tight, this will displace hips and don't put too much between their legs as it will displace also.

For sore eyes bathe in warm boracic water. A good powder is made of half powdered boracic acid, half talcum powder or corn starch.

If a child breathes through its mouth instead of its nose take it to a doctor it may have adenoids in the passage and an operation will be necessary.

Plenty of fresh air is very necessary. I live on a farm and my children are outside most of the time. This is a long letter but perhaps there are parts of it you may find useful to some so dispose of it as you see fit.—Yours truly, Mrs. W. A. Nickason.

P.S.—Feeding bottles can be cleaned perfectly by putting diced raw potato, soda and water in bottle and shake. Bottles should be kept perfectly clean.

WIN

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Real 5 horse power auto with high class air cooled 4 cylinder gasoline motor, just big enough for one boy or girl. Built like big cars. Has artillery wheels, solid rubber tires, steering gear and wheels, 2 brakes, tool box, tools, cone clutch. Any boy or girl can run it easily. A real prize for boys and girls.

THE PRIZES

PRIZE	VALUE
1st—Five Horse Power Auto	\$150.00
2nd—Dandy Folding Camera	25.00
3rd—Magnificent Gold Watch and Chain, or Girl's Wrist Watch	15.00
4th—Lovely 36-inch Doll, hand-dressed, and beautiful English Doll Carriage	10.00
5th—Electric Projectoscope. Better than a magic lantern. Will show any picture or postcard photo on screen	7.50
6th—Full-size Football	5.00
7th to 10th—Self-Filler Fountain Pens, each \$2.50	10.00
Also 10 Extra Prizes for Boys and Girls, each \$1.25	12.50
Total Value of Prizes	\$235.00

23	8	5	14	•	7	5	18
13	1	14	25	•	9	19	•
4	5	6	5	1	20	5	4
•	1	14	4	•	14	15	20
•	1	•	13	9	14	21	20
5	•	2	5	6	15	18	5

WHEN WILL THE WAR BE OVER?

CAN you answer this question—When will the war be over? Every boy and girl wants to know. You can, if you are able to read this puzzle. The answer is contained within the 48 squares above. What is this answer? Solve it, and valuable prizes await you.

HOW TO SOLVE IT

The above squares hold the answer. It is in one sentence of nine words, containing forty letters. Each letter is represented by a number, and that number is the position of the letters in the alphabet. For instance, A is represented by the figure 1, as it is first in the alphabet, and so on. Now, to help you get started, we will tell you that the first letter in the puzzle is "W," because W is the 23rd letter in the alphabet. Get to work and figure out the words in the sentence, and try to find the answer to the great question, "When will the war be over?" It is not easy, but it is worth while trying for.



You will be the Envy of all your Friends with this Car

THE AUTO-MAN, EVERYWOMAN'S WORLD, Dept. 2

Send your answer this very evening. Address: TORONTO, ONT.



FREE Grand 38 - Piece Scholar's Outfit and a Dandy \$10.00 Camera

BOYS AND GIRLS—This is the best and most complete Scholar's Outfit you have ever seen. It would cost you a small fortune to go into the store and buy all these useful and necessary articles. **Just read what it contains:**—One large size English school bag, boy's or girl's style, three gold finished nibs, big complete printing outfit with three rows of type, type holder, trowers, and everlasting ink pad, one dozen high grade lead pencils, a fine pencil box with lock and key, a fine grade eraser, a fine quality pencil sharpener, a sanitary covered aluminum pocket drinking cup, a box of fine crayons, a box of paints containing good colors, a twelve inch wooden ruler, a set of six blotters, a dandy hundred page scholar's memo pad, a point protector for your lead pencils fitted with fine eraser, and last, but not least a fine self-filling fountain pen with a package of ink tablets, sufficient to make five bottles of finest quality fountain pen ink. **It is a wonderful outfit.** Send us your name and address today and we'll send you only 24 bottles of our lovely new Corona Bouquet Perfume to introduce among your friends at only 15c each. This delightful odor is a wonderful blending of the true perfumes of flowers. Everyone wants two or three bottles and you can sell them in no time. It's easy.

Return our money, only \$3.60 when the perfume is sold, and we will at once send you this grand 38-piece scholar's outfit exactly as represented, and the beautiful \$10.00 folding film camera will also be sent to you for just showing your grand scholar's outfit to your friends and getting only 5 of them to sell our goods and earn our fine premiums as you did. We pay all delivery charges on your grand outfit right to your door. Write now while you think of it and be first in your school to own one of these grand outfits. We take back goods you cannot sell and give presents for what you do sell.

Address: GOLD DOLLAR MANUFACTURING CO. Dept. S. 11 Toronto, Ont. 22B

Buy Victory Bonds

Buy Bonds To Bring The Boys Home

SOMETHING YOU WILL LIKE



WARM, STYLISH SET OF BLACK WOLF one of the very special values offered, fine silky jet black fur which will give real service. SCARF is wide on shoulders trimmed with head, tail and paws as shown, MUFF is large, roomy and warm, trimmed as shown, sateen lined, silk poplin ends and wrist ring, scarf lined with silk poplin. A rich dressy set at a very moderate price.
M 892, Price Per Set Delivered..... \$25.90



STYLISH COAT OF NORTH-ERN MUSKRAT made from the finest selected skins, length 60 inches, cut full and roomy, finished with full belt. Note the deep sailor collar and the handsome reverse border effect on the skirt. Lined with guaranteed satin Venetian. MUFF to match, cut in reverse effect to match border on coat. Sizes 34 to 44.
M 712, Coat Delivered..... \$155.00
M 713, Muff Delivered..... \$22.60

FREE Hallam's 1919 FUR FASHION BOOK

It is larger and better than ever—showing a wonderfully extensive range of Fur Sets and Fur Coats—we do not think there is a fur book published in Canada equal to this—it contains 48 pages and cover, with over 300 illustrations of beautiful furs—photographed on real living people—thus you see how the furs actually appear—it also gives a lot of valuable information about Fur fashions, and what leaders of fashion will be wearing.

Everyone should see this BOOK, it shows Fur Coats from \$36.00 up to \$550.00 and Fur Sets from \$6.50 to \$300.00.

The articles shown here are all taken from this Fur Fashion Book and will be promptly sent on receipt of money.

Thousands of pleased people from all parts of Canada, who have purchased Hallam's guaranteed Furs by mail, bear testimony to the wonderful values given.

As we are the only firm in Canada selling Furs exclusively by mail and direct from "Trapper to Wearer" you save all the middlemen's profits when you buy Hallam's guaranteed Furs.

Write to-day for YOUR copy of Hallam's 1919 Fur Fashion Book—it will save you money.

Address in full as below:

John Hallam Limited
205 Hallam Building TORONTO

Snappy—up to date—of course—but more than everything else, in every HALLAM Fur Garment there is sterling quality, which means long wear.

You see HALLAM buys the Raw Furs direct from the Trappers for Cash, and every skin is carefully inspected—sorted and matched.

Then Hallam selects the best and most suitable skins, makes them up into the famous *Hallam Guaranteed Fur Garments* and sells them by mail direct to you for cash.

With over 32 years' Experience in the fur business, we are able to select and guarantee the Skins used in Hallam Furs and to give unexcelled values for the money.

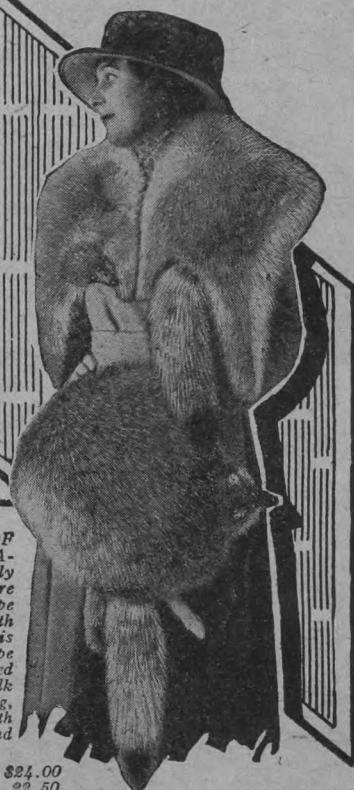
And how easy for you—simply look through HALLAM'S Fur Fashion Book, select the articles you think you like and send the order to us by mail; no time wasted—no noise—no waiting in a busy store—no bother—and no urging by an anxious sales clerk—then by return you receive your furs—the whole family can examine them in your own home without interference—and at your leisure.

If you like them "Nuff-Sed," but if you are not satisfied for any reason, simply send the goods back and we return your money in full at once, as this is our *Positive Guarantee* under which all HALLAM FURS are sold.

You Cannot Lose—be up to date, **BUY YOUR FURS BY MAIL FROM HALLAM**

It is easier—more pleasant—and cheaper.

Hallam's
GUARANTEED
Furs
"FROM TRAPPER
TO WEARER"



DURABLE, WARM COAT OF MANCHURIAN FUR, 60 inches long, made from jet black glossy, full-furred skins. It is very full and roomy and just the garment for hard wear and warmth combined. Lined with farmer's satin, finished with pouch pocket, fastening with large crocheted buttons. Deep storm collar and lapels, deep cuffs on sleeves. Sizes 34 to 46. MUFF to match in barrel shape trimmed with head and tail, satin cuff and ring.

M 730, Coat Delivered..... \$45.00
M 731, Muff Delivered.... 8.50

HANDSOME SET OF NATURAL GREY CANADIAN WOLF, beautifully soft full-furred skins are used. Scarf is in wide cape effect, giving great warmth and protection. MUFF is in the new "Canleen" shape roomy and warm, lined throughout with grey silk poplin, muff has wrist ring, silk cuffs, etc., trimmed with natural heads, tails and paws.

M 866, Scarf Delivered.. \$24.00
M 867, Muff Delivered.. \$22.50

Box 12, Colonsay, Oct. 7.
Dear Madam:—

I SAW your better baby contest in The Thresherman, so thought I would like to write you a little of my experience, as I believe it is an experience young mothers often have when they have to wean their babies.

My first baby girl weighed six and a half pounds when born. I nursed her and partly fed her for the first three months at the end of that time I decided to wean her as I had very little

milk and couldn't get the cow's milk to agree with the milk I had, or at least I thought I couldn't.

The next month I tried cow's milk first, giving it the same as the doctor and nurses give in the formula for babies of that age, but she didn't grow at all and was very cross, then I tried Allenbury's milk food she grew a little, but at four months only weighed twelve pounds. In the next three weeks she lost two pounds, she was terribly scalded and had a great many moves of

the bowels in a day. I didn't know what to do, but happened to look in a book we have, entitled "The Home Library," and in the baby department it tells just what cow's milk contains, and how it acts on a baby's bowels. I saw at once that the Allenbury's food was too rich for her and had too much sugar, causing the scalding. In her next feed of the Allenbury's, I put two teaspoons of skim milk (skim milk contains the protein). I continued this for a week, and in that time she gained

half a pound, after that I gradually put her on cow's milk. When I got too much skim milk and not enough cream, I could tell right away by the green moves. I hope you don't mind me mentioning this subject, for I realize that the whole secret lies in the right portion of fat and protein being fed, as for the sugar. I didn't give any to her after that, if I did, she scalded, but all babies are not alike and I think every mother should learn just how milk affects the baby. I am sure lots of

MASTER MECHANIC OVERALLS



**Reduce
the
High Cost
of
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You can't beat them for economy, comfort and convenience.

Made from the highest quality materials by most skilful labor.

There is a positive guarantee in the hip pocket of every garment.

LOOK FOR IT!

WESTERN KING
Manufacturing Co., Limited
Winnipeg, Canada

babies could be saved in this way for people thought Thelma had indigestion, Thelma is my little girl's name, and I'll send you her picture. I have another girlie now and have had no trouble at all, although I find the milk acts just the same way with her. When this subject is studied it is very interesting and there is no changing from one food to another, just the quantity of cream and skim milk. I used to think that to make the feed poorer I should add more water, of course I give water with the milk and cream. Now at three months I give my baby half water and the other



Thelma Jeffery at the end of her first year among folks

half milk and cream. I will close hoping this may help someone, if this is too late for the contest and you think it written well enough to print I would be pleased. Wishing all mothers God-speed, I remain, Mrs. A. L. Jeffery.

P. S.—Thelma is one year old when the snap shot was taken.

VALLEY RIVER H. E. S.

THE August meeting of The Valley River H. E. S. was held in their room in the basement of the school.

The business of the meeting was quickly transacted. Funds were received to pay for eggs sent to The Secour French Red Cross. After arrangements had been made for the next meeting the meeting adjourned.

The members of The Boys' and Girls' Club then entered the room and every one gave attention to a demonstration in canning given by Mrs. McCaul and Mrs. Riddell for the benefit of The Junior Club. Girls particularly took a keen interest in proceedings. Fruit, vegetables and fowl were canned, and many timely and useful pointers in canning were given by the visiting ladies.

A vote of thanks was tendered Mrs. Riddell and Mrs. McPaul and the gathering dispersed.

An interesting feature of the meeting held at the home of Mr. Thos. Playford was the reciting, by little Miss Ellen Playford, of an original poem composed specially as an address of welcome to the society visiting her home. As it expressed much of the spirit of the times I trust you will find space for it.

"Welcome, Ladies, to our home,
We are glad that you have come
On the pleasant day of June,
When all Nature seems in tune.

Trees and fields now all are green,
Tiny plants may now be seen,
In the gardens, far and wide,
Pretty scenes on every side.

'Tis a noble work you do,
For what's great and good and true
Everything you undertake,
Will us wiser, better make.

You all love this Union Jack
That will drive the Germans back,
And for us our freedom gain
In that land of care and pain.



The something you get for nothing is probably worth it, but the poor tea you buy cheap is a loss.

Drink

BLUE RIBBON TEA

and get value

9

The New LIGHTER DAY RANGE

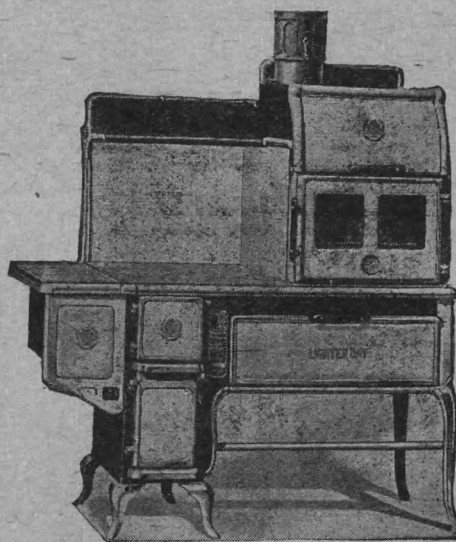
High Oven
Coal or Wood

There is greater ease of operation, better heat control and more economy on fuel with this range than with any other stove on the market.

A Great Cooker---A Quick Heater

The construction of this range allows the fire to travel up in the most natural way. This uses the full heat from the fuel used and also heats the oven in a

much shorter time. All baking is done on a "standing" level—no stooping necessary to watch your roast or baking.



We have some interesting pictures we shall be glad to send you.

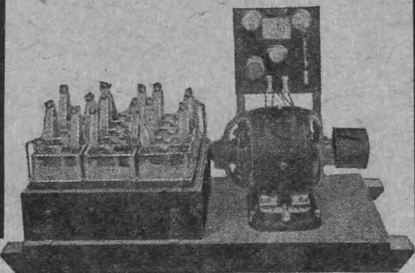
**Clare Bros.
Western Limited**

Dept. D.
WINNIPEG MAN.

**Your Bond is the
One Thing Wanting to Bring
the Boys Home**

Lister Lines

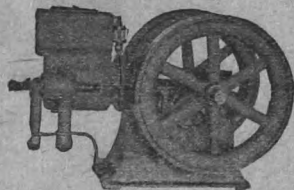
**Are Built To Give 100%
Service**



Lister Storage Battery Electric Lighting Plants

Very simple design; battery, generator and switchboard assembled on one base. No complicated mechanism. Anyone can run them. Made in four sizes—15, 20, 25 and 32 lights. If you have a 2 or 3 h.p. Gasoline Engine, it can be belted to the generator on this plant, or we can supply you with a high grade engine suitable for the work at low cost.

"Canuck" Gasoline and Kerosene Engines



Made in sizes: 1 1/4, 3, 4, 6 and 10 h.p. Reliable and economical farm power. Simple, easily operated; light in weight, finely balanced. Very low fuel consumption. Compact design. Jump spark ignition—enclosed crank case and high grade carburetor. Five year guarantee.

Write for Illustrated Catalogs and Prices

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"Lister" and "Canuck" Gasoline and Kerosene Engines—Grain Grinders and Crushers, Combination Threshers, Milking Machines, Cream Separators, Churns, Ensilage Cutters, Silos, Sawing Outfits, Pump Jacks, Pumps, Power Pumping Outfits. Prices and information on any of these will be gladly given on request.

**R. A. LISTER & CO.
(Canada) Limited**

WINNIPEG

Toronto

Montreal

FOR SALE CHEAP—10-20 h.p. Case gas engine with Grand De Tour plow, 3 stubble and 2 breaker bottoms with extra shares. In good condition. Snap at \$1,200, complete. H. Stainforth, Aldersyde, Alta.



Strength

Roomy and comfortable—yet ready for the unexpected tug—

NORTHERN Shirts & Overalls

Money saved is money earned. You earn money for yourself if you wear NORTHERN Brand

The Northern Shirt Co. Ltd.
WINNIPEG



If you have a friend at the front he will appreciate a Jaeger Sleeping Bag. Send it to him now for a Xmas Gift. An undyed Camel Hair Blanket will also be appreciated. These are useful gifts which he can use at all times and which will give him warmth and comfort.



A fully illustrated catalogue will be sent free on application.

DR. JAEGER Sanitary Woollen CO. LIMITED
Toronto Montreal Winnipeg
British "founded 1883"

RAW FURS

OUR ADVICE

Ship to us at once and Reap Benefits of High Prices now prevailing.

Price List and Shipping Tags FREE

Pierce Fur Co. Ltd.
Richard M. Pierce, Manager
King and Alexander, WINNIPEG, Canada

We Also Buy HIDES and SENECA ROOT

FOR SALE OR TRADE—I have a 36-60 oil pull tractor in good shape; will trade for large steam engine or will sell tractor with 40-64 Rumely separator at a bargain. Curtis C. Baldwin, Sparta, Michigan.

We all love the boys who go,
They will win the war, we know,
Cross the ocean, wide and blue,
They will to this flag be true.

Now you try the food to save,
For the good and for the brave,
Every sacrifice you make,
Will be for your country's sake.

If you try to save our land,
By doing what comes to your hand,
You will be forgotten never,
Farmers' wives of Valley River.
Adela M. McQuay.

Remaining letters received in Baby Contest will all appear in our Christmas issue.

THE MERCHANT MARINE

EX-PREMIER ASQUITH, speaking in Glasgow recently, attributed the successful termination of the war to the following factors, "the British Navy, the Merchant Service, the armies, airmen, and British finance."

The prominence given by this great statesman to the magnificent work of the Royal Navy in protecting the seas, and to the Merchant Service in effecting the safe transport of millions of men and thousands of tons of munitions, food-stuffs and hospital supplies in the face of tremendous odds and in hourly peril of death, may be taken as a just estimate of the relative value of our naval forces in achieving victory for the Allied Nations.

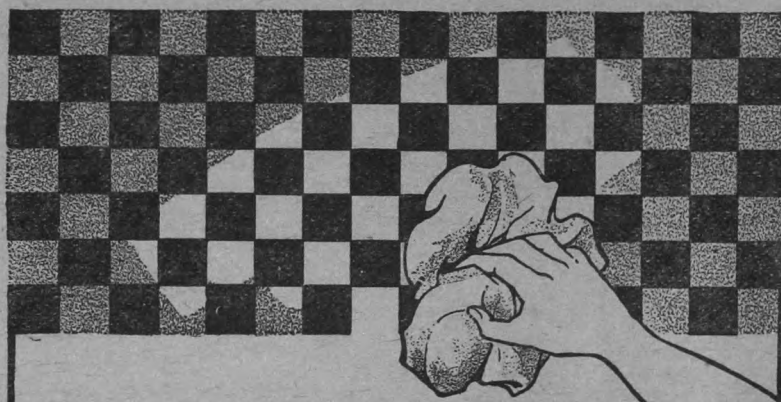
It is, of course, evident to all that had the enemy submarine menace once gained control of the seas, and rendered impossible the augmenting of our fighting forces and the sustenance of the troops, defeat would have been inevitable, and the life of the British Empire would have been at stake.

Since the beginning of the war 16,000 of these Merchant Seamen have lost their lives in their country's service. The dependents of these men, bereft of their mainstay and support, are left unprovided for. Canada owes a debt to these sailors which it can never repay.

The sum of \$150,000 is being asked as Manitoba's contribution toward the relief of these stricken families. It is felt that this is a comparatively small amount taking into consideration the great obligation which has been placed upon the people of the West, whose prosperity during the past four years has depended so vitally upon the marketing of their crops and the exportation of their products, upon which the whole fabric of our agricultural, industrial and financial system is based. A grave responsibility therefore devolves upon us for the care of the dependents of these men whose unselfish devotion to duty and splendid disregard of danger has kept open the markets of the world and contributed so materially to the safeguarding of that freedom which is our priceless heritage, and without which all our industrial successes would be unavailing.

December 1st to 7th, "Sailors' Week," has been set apart for the collection of this amount. Owing chiefly to the Victory Loan campaign and the prevailing epidemic it has been found impossible to effect a complete organization of the large territory which a thorough canvass of the province involves. It is felt that such a worthy cause will enlist the enthusiastic support of every citizen, and that every man, woman, and child in Manitoba should be given an opportunity to contribute. In the heavy task of collecting so many thousands of individual subscriptions, it is possible that some may be overlooked. The Campaign Committee would appreciate it very highly if contributors whose subscriptions are not personally called for, would mail their subscriptions direct to Campaign Headquarters, The Navy League of Canada, Winnipeg.

FOR SALE—Complete Threshing and Plowing Outfit; 40 h.p. Flour City Gas Tractor, in prime condition; also Yellow Fellow Avery Separator, 22-36, complete with all attachments. Outfit cost originally \$7,000. Will sacrifice, as I have sold farm. What offers? Cash or terms. X., care of E. H. Heath Co., Box 3164, Winnipeg.



Clean tiled walls and floors with Old Dutch.

In fact you'll find Old Dutch is best for cleaning anything that's hard to clean throughout the house. Besides, it's more economical than soap or any other cleaning material.

Old Dutch Cleanser



MANTLE
DAYLITE
OIL LAMP

NOTE PRICES

Complete with Shade

\$10.00

Without Shade

\$8.25

THE IDEAL LAMP for the HOME

Its beauty and its utility will appeal to you. It is 23 inches high over all, and the mantle is 12 inches above the table. Reservoir holds about 1½ quarts of oil. It gives a pure, white light, with no noise, no odor, no smoke, and is simple to operate.

Burns Coal Oil. No Pumping of Air. Safe. Can't Explode

No expensive parts to replace, and mantles should last six months or longer with ordinary care. We guarantee you entire satisfaction. Send for the lamp to-day, enclosing purchase price. Use it in your own home. If you are not entirely satisfied, return the lamp within 10 days, and we will promptly refund your money without question.

We Sell Our Lamps Direct and Save You Dealers' Profits

Our direct selling plan saves you two or three dollars on each lamp and our money back guarantee gives you full protection. You run no risks whatsoever. Send in your order to-day as prices may advance. No dealers or agents. Order direct from

THE DAYLITE CO.

500 Builders Exchange

WINNIPEG, Man.



The great racing Pedalmobile is built exactly like a 6 cylinder 80 horsepower motor car. It has real electric headlights, wind shield, gasoline tank, three speed lever, steering wheel, radiator, horn, lamps, etc.

HERE IS THE GRANDEST PROPOSITION EVER MADE

BOYS, you can earn this big, handsome racing Pedalmobile and be the pride of the town.

Pedalmobiling is the greatest sport ever invented; you simply jump in the car, apply the speed lever, touch your feet to the pedal and go spinning along to beat the band. Put on your coaster and take the hills without pedalling, turn the sharpest corners without fear of spilling, blow your horn if any one is in the way, or reverse your speed lever and stop. In fact, the Pedalmobile will do everything a real auto will do but burn up gasoline. Beats bicycling all hollow, and just think of it, boys, you can get a racing Pedalmobile absolutely free and a Jim dandy World's Champion Knife as well that anybody would be proud to own. It has two strong steel blades, stag horn handles, metal tips, initial plate and comes to you complete with fine chain so you can't lose it.

If you are a live go-ahead boy and these two grand prizes interest you just send us your name and address. We want you to help us advertise and increase the demand for Fairy Berries, the delightful new cream candy coated breath perfume that everybody just loves, THE REGAL MANUFACTURING CO., Dept. W. 11

Write today and we'll send you FREE, a big 10c. package of "Fairy Berries" to try yourself and with it just 35 handsome packages to introduce among your friends at only 10c. a package. Open your sample package, try "Fairy Berries" yourself and then ask all your friends to try them.

They'll like them so much that everybody will like to try a package or two, and you'll sell them all very quickly. It is easy. Return our \$3.50 when your sales are completed and we'll promptly send you the magnificent knife, all charges paid, and the big Pedalmobile you can also receive without selling any more goods by simply showing your fine prize to your friends and getting only six of them to sell our goods and earn our fine premiums as you did.

Hurry Boys. Be the first Pedalmobile driver in your town. Other boys are earning these fine knives and great cars, and you can too. You take no risk. If you cannot sell all the "Fairy Berries," you can return them and get prizes or cash for what you do sell. Write to-day to

TORONTO, ONT. 10B

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COMBINGS!

LADIES—We make your combings into switches, any quantity, for **\$3.00**
15c Postage.

Satisfaction Guaranteed.

New Hair added to Combings from \$2.00 worth up if desired.

Elite Hairdressing Parlors
301 Birks Building
WINNIPEG



Best for Baby

After many years' use by parents of all classes, in Royal Nurseries and humble homes, Savory and Moore's Food has the reputation of being a thoroughly reliable food for infants.

The experience of parents, nurses, and medical men all goes to show that babies do thrive remarkably well on this famous food, that its use prevents infant ailments, and that it builds up a strong constitution, so important in later life. You may therefore bring up baby on Savory & Moore's Food with the assurance that you are doing the best you can for your child.

MOTHER'S GUIDE FREE

Savory & Moore's little Book, "The Baby," is full of useful information on Infant Management, and contains hints on Feeding, Teething, the Toilet, Infant Ailments, and many other subjects. It is just what a young mother needs, and will prove invaluable in the home. A Free Copy may be obtained on application to Savory and Moore, P.O. Box 1601, Montreal.

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SHIP YOUR
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WRITE FOR CIRCULAR
TRAPPERS GUIDE FREE TO THOSE WHO
SHIP TO US

WANTED, PERSONS TO GROW MUSH-ROOMS for us at home; from \$15 per week upwards can be made by using waste space in Cellars, Empty Rooms, Root Houses, etc. (start now); illustrated booklet sent free. Address Montreal Supply Company, Montreal.

ONE FOUR-FURROW PLOW, 14in. bottom; practically new; manufactured by Deere Plow Co. Also 15-30 Gasport Tractor, two-cycle engine; good powerful machine. \$500.00 cash for lot; F.O.B. Burlington Junction, Ont. Bethanbreck Orchards, 503 Lumsden Building, Toronto, Ontario.

Mayonnaise Dressing

1 teaspoonful dry mustard, 1 teaspoonful salt, 2 egg yolks, 2 tablespoonfuls lemon juice, 2 tablespoonfuls vinegar, 1½ cupfuls oil, ½ teaspoonful paprika, ½ teaspoonful sugar, cayenne to suit taste. Mix well the dry ingredients, beat with them the egg yolks and when smooth add a half teaspoonful of the vinegar. Begin adding the oil very slowly, almost drop by drop, beating all the time—here is where a mayonnaise mixer proves its worth. As the dressing thickens add, little by little, first some of the vinegar, then some of the lemon juice, then the oil. It requires constant, patient, and steady beating to produce good mayonnaise. It is a good plan to have the beating bowl set in a larger bowl or pan of cracked ice while working, and all ingredients and implements should be well chilled before beginning operations. When completed the mayonnaise should be stiff enough to stand alone, and can be put through a pastry tube for decorative effects.

Boiled Salad Dressing

¼ teaspoonful salt, 1 teaspoonful dry mustard, 1½ teaspoonfuls sugar, 1½ tablespoonfuls flour, 2 egg yolks, 1½ tablespoonfuls melted butter, ¼ cupful vinegar, ¾ cupful milk, cayenne to suit the taste. Mix dry ingredients, add egg yolks, then slowly the butter, milk and vinegar. Cook in double boiler until thick, then strain and chill. This is much liked by those who do not care for oil. Russian or Thousand Isles dressing may be made with this the same as with mayonnaise.

Peanut Loaf

3 cupfuls stale bread crumbs, 2 cupfuls milk, 2 teaspoonfuls salt, ½ teaspoonful pepper, ¼ teaspoonful poultry seasoning, 1 tablespoonful onion juice and pulp, 2 eggs, 4 teaspoonfuls baking powder, 1½ cupfuls chopped peanuts. Add bread to milk; add seasoning, beaten eggs, baking powder, and peanuts. Pour into greased, lined baking tin. Bake in moderate oven 40 minutes.

Cream of Potato Soup

¼ cup mashed potato, ½ teaspoonful salt, 1 cupful milk, 1 tablespoonful butter substitute, ½ tablespoonful flour. Melt fat. Add dry ingredients and gradually the milk which has been scalded and the potato blended with it. Bring to boiling point and serve. A beaten egg may be added if desired.

Fruit Short Cake

1 quart of berries, sliced peaches or other fruit, 1 cupful barley flour, 1 cupful white flour, 4 teaspoonfuls baking powder, ¼ teaspoonful salt, 1 tablespoonful shortening, ¾ cupful milk. Sift together dry ingredients, rub in shortening with tips of fingers. Work in the milk. Put into two jelly-cake tins. Bake from twelve to fifteen minutes. Pull apart while hot;



FREE DANDY BICYCLE AND GREAT WATER PISTOL

Boys send us your name and address to-day and you can get a Real Daisy Water Pistol and our great Flying Champion Bicycle in return for a little easy pleasant work. This is the finest bicycle any boy could own. It has a 22 inch frame, coaster brake, non-skid tires, roller chain, and all the most up-to-date improvements—just the slickest, spickest bicycle you've ever seen. And the Daisy Water Pistol beats all, just what you've always wanted. It looks like a real automatic revolver, but shoots a straight, powerful stream of water that will chase dogs or cats, & provide a barrel of fun.

Here's Our Proposition for Live Boys
No Money in Advance.—Just send your name and address to-day and get a free sample package of "Dainties", our delicious now whipped-cream candy coated breath perfume that we want everybody in the land to try. With the free sample we send you just 30 handsome packages that we want you to introduce among your friends at only 10c. a package. The sample package will make it easy for you. Just open it and ask your friends to try a couple of "Dainties". They will like them so much that everyone will buy a package or two at once. A couple of little "Dainties" will purify the mouth and perfume the breath. Everybody just loves them. No trouble at all to sell.

Return our \$3.00 when the breathlets are sold, and we will promptly send you, all charges prepaid, the dandy Daisy Water Pistol, and the grand bicycle you can also get without selling any more goods, by just showing your fine prize to your friends and getting only six of them to sell our goods and earn our fine premiums as you did. Write to-day boys and you can soon own these fine rewards.

Address—THE REGAL MANUFACTURING CO. Dept. N 11 TORONTO, ONT.

butter and put fruit in, in layers, sprinkling sugar on each layer.

Louisiana Rice Corn Bread

Rice improves either plain corn bread or corn bread made with eggs and milk. Use it in both. Corn bread made with eggs and milk is rich in body-building material.

3 eggs, 1 pint of milk, 1½ cupfuls of cold boiled rice, 1½ cupfuls of corn meal, 2 tablespoonfuls of melted fat, 1 teaspoonful of salt, 1 teaspoonful of baking powder. Beat the eggs very light; add the other ingredients in the order named; beat hard and bake in a shallow, greased pan in a hot oven.

Oatmeal Hurry-Ups

1 cupful of rolled oats, ½ cupful of flour, 2 teaspoonfuls of baking powder, ¼ teaspoonful of salt, 1 tablespoonful of fat, ½ cupful of milk (about), ½ cupful of chopped dates. Mix the oats, flour, baking powder and salt. Cut in the fat. Add the milk and mix, forming a soft dough. Lastly add the chopped dates. Drop into greased muffin tins or onto a greased baking sheet and bake in a quick oven.

Corn-Meal Nut Bread

½ cupful of corn meal, ½ teaspoonful of salt, 1 level tablespoonful of vegetable fat, ½ cupful of boiling water, 1½ cupfuls of rye flour, 4 teaspoonfuls of baking powder, ¾ cupful of milk, ½ cupful of chopped nuts. Put the corn meal into a bowl; add the salt, fat and boiling water; mix; let stand for twenty minutes. Now add the flour mixed with the baking powder and the milk, and lastly the chopped nuts. Mix lightly; pour into a well-greased bread pan; let stand in a warm place for twenty minutes. Bake in a moderately hot oven. Do not cut until cold.

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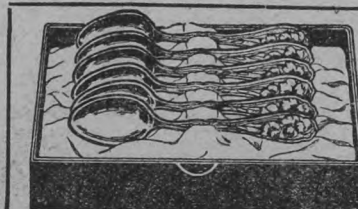
97 Piece Dinner Set

and lovely
Silverware Given To You

YOU can secure without a penny of cost this magnificent complete 97-piece English Dinner Service and a lovely set of half-dozen Wm. A. Rogers teaspoons. Each dinner service is guaranteed full size for family use, its 97 pieces comprising 12 cups and 12 saucers, 12 tea plates, 12 dinner plates, 12 bread and butter plates, 12 soup plates, 12 sauce dishes, 2 platters, 2 oval covered vegetable dishes, a cream jug, covered sugar bowl, a gravy boat, pickle dish, and a salad bowl. It is handsomely decorated in rich floral design and will surely delight the most fastidious housekeeper. The beautiful set of Teaspoons are in the famous Wm. A. Rogers French Carnation design with French grey handles and brightly polished bowls.

Read our Wonderful Offer

We are determined to establish a national reputation for Dr. Edson's Famous Life Building Blood Tonic and Nerve Pills and are sparing no expense to secure representatives in all parts of Canada who will help us by introducing this famous remedy to their friends and neighbors. That is why we offer to give away these magnificent premiums.



We pay all delivery charges on these Grand Premiums

Carnation French Canadian Teaspoons

Genuine Wm. A. Rogers make—the most beautiful pattern ever seen. These magnificent spoons will delight any housekeeper and they are guaranteed to give every satisfaction in wear.

Will you sell just 12 boxes among your friends at only 25c. per box?

You can easily do this because every one you know will be glad to learn of this grand remedy. It is one of the world's best known prescriptions, a tried and proven remedy for weak and impure blood, nervousness, indigestion, constipation and anaemia. In all run down conditions of the system it will be found a grand blood builder and revitalizer, and as a general tonic for blood and nerves it has no equal.

Send No Money—Just send your name and address to-day and we will send the 12 boxes postage paid. You will be able to sell them quickly and easily because every purchaser of a box can obtain a beautiful gift of fine silverware from us free. Then return our money, only \$3.00, and we will promptly send you, all delivery charges paid, the beautiful set of spoons, and the handsome dinner set you can also receive without selling any more goods by simply showing your fine reward among your friends and getting only six of them to sell our goods and earn our fine premiums as you did. We pay all delivery charges right to your door.

REMEMBER YOU TAKE NO RISK. You do not spend a cent of your own money. We trust you with our goods until sold and if for any reason you cannot sell them we will take them back and give you beautiful premiums or pay you a big cash commission on the quantity you do sell. Write to-day if you wish to take advantage of this liberal offer. It gives you the opportunity of a life-time. Address X26

The International Mfg. Co., Dept. D 11 Toronto, Ont.

IN ACTION



At the NATIONAL TRACTOR DEMONSTRATION at Salina

The above photograph was taken at Salina, Kansas, during the recent National Tractor Demonstration. It speaks for itself. Note the quality of work and the number of disc plows drawn—37 in all.

Three Aultman-Taylor Tractors were demonstrated—15-30, 18-36, and 30-60 H. P. respectively. The 15-30 size made its first appearance in public and its wonderful performance was witnessed by thousands of interested farmers whose verdict was unanimous that this new and smaller size Aultman-Taylor Tractor is a "Comer" in the light tractor field. In plowing, it pulled four plows 6" to 8" deep and had power to spare. In discing, 7-24" disc plows were drawn in hard going, each cutting a furrow 8" wide and from 6 to 8" deep.

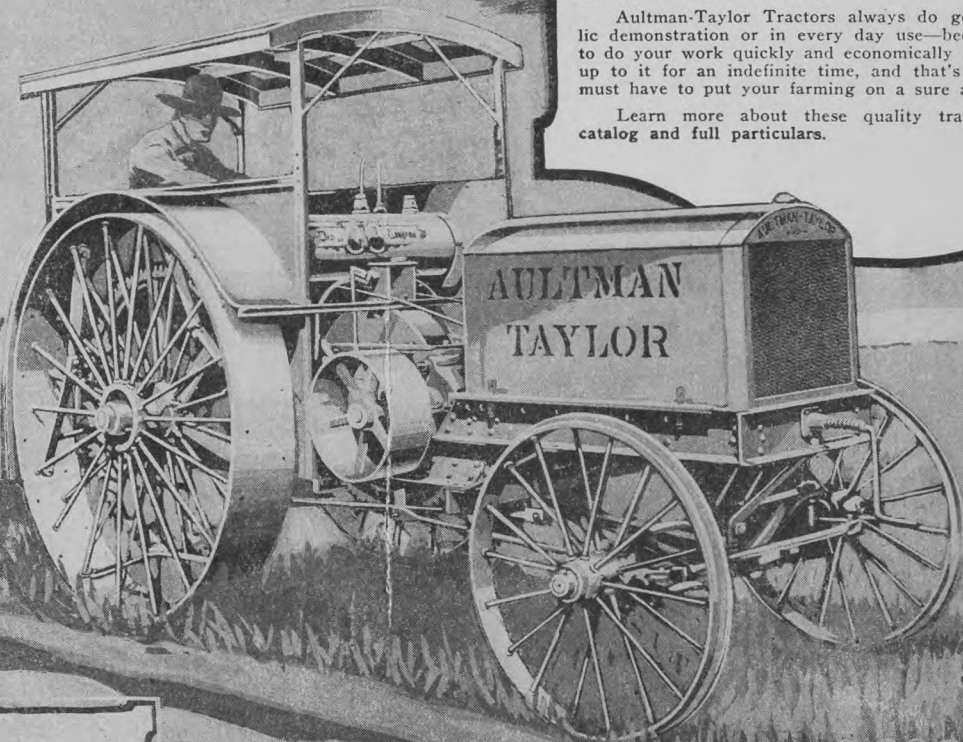
The 18-36 H. P. pulled five and six plows and in discing, 10-24" disc plows were drawn with ease.

The 30-60 H. P., the leader in the large tractor field, walked right off without a falter with ten 14" plows, and in discing, pulled 20-25" disc plows and could easily have drawn more. The work was first-class in every instance. Kerosene was used for fuel on all three sizes during the entire demonstration.

The Aultman-Taylor Tractors demonstrated at Salina were not "Doctored up" for the occasion but were regular stock tractors, the same as you would get were you to order one today. Here you have a striking example of the splendid work these big-powered, high quality tractors are doing for thousands of owners at every kind of work in every part of the country.

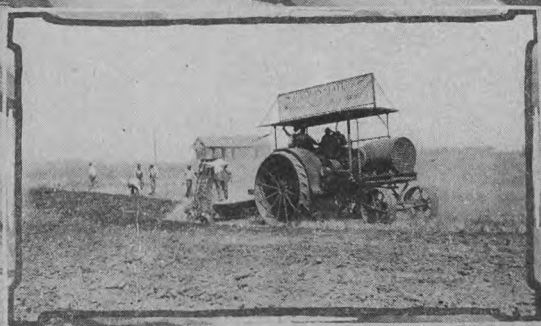
Aultman-Taylor Tractors always do good work whether in public demonstration or in every day use—because they have the power to do your work quickly and economically and the sturdiness to stand up to it for an indefinite time, and that's the kind of a tractor you must have to put your farming on a sure and profitable basis.

Learn more about these quality tractors—write us today for catalog and full particulars.



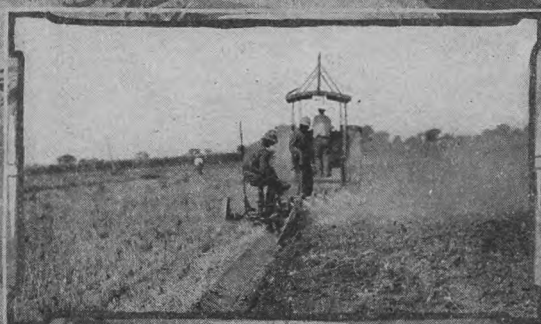
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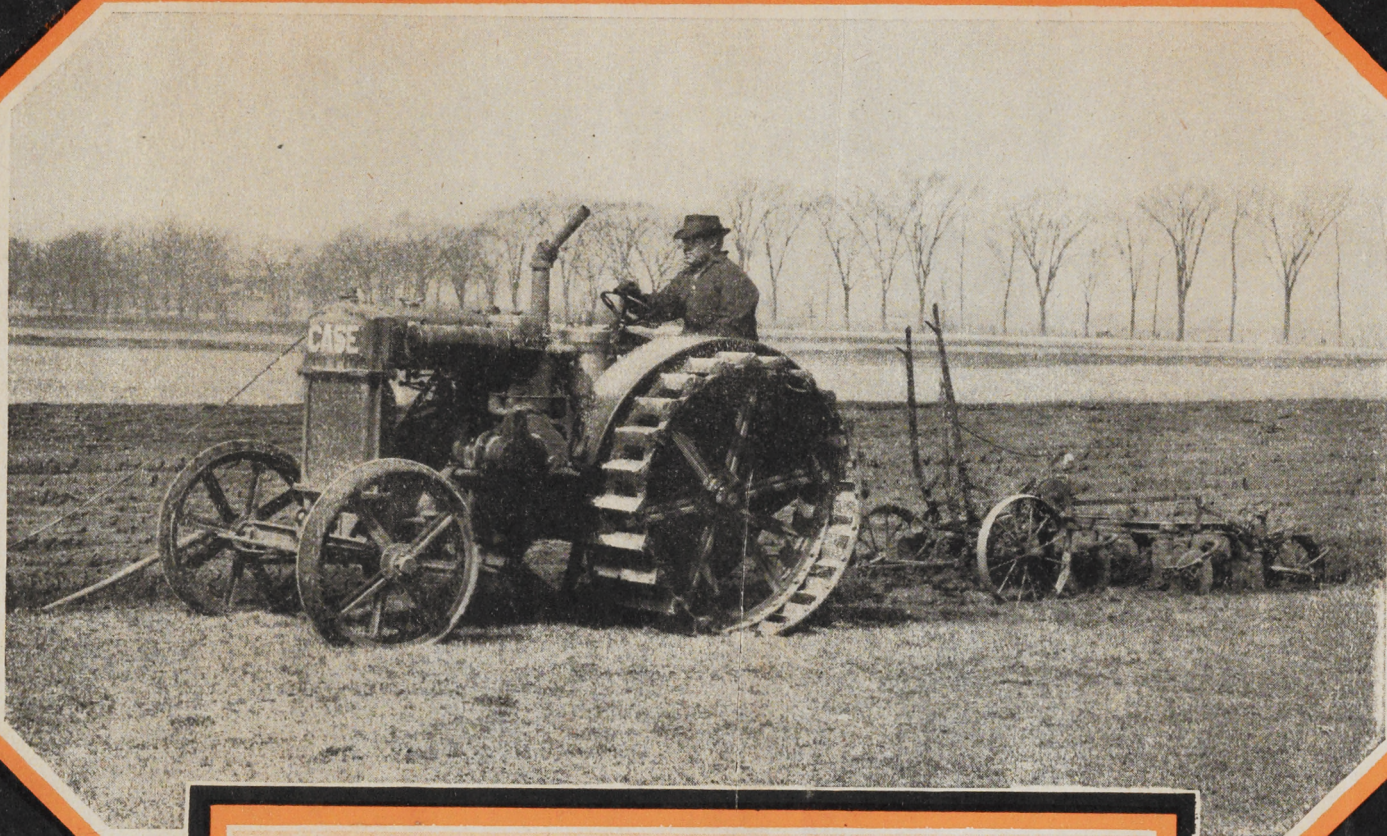
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Burns Kerosene

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It was designed and built by Case engineers to include every worthwhile development.

There is nothing experimental about it. Though it is new, it embodies old and tried principles, such as we have learned in 26 years of gas tractor building.

Back of this super-tractor stands the Case name and reputation. That means to most men a guarantee of performance and quality.

This tractor brings, as never before, advanced ideas which you will immediately appreciate.

A study of specifications, which we will send gladly, points out its advantages — such as reserve horsepower, one-piece main frame, four-cylinder motor, improved air washer, Sylphon Thermostat, five-piece radiator, all cut steel gears enclosed and running in oil, and dozens of other superiorities.

This is a worthy addition to the Case line of kerosene tractors and has already won many friends. In its class it is bound to be a leader.

Before buying any tractor of any size be sure and investigate the Case line, which now includes four sizes.

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